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DEPARTMENT OF THE INTERIOR AND RELATED
AGENCIES APPROPRIATIONS FOR 1983

HEARINGS
BEFORE A
SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES
NINETY-SEVENTH CONGRESS
SECOND SESSION

SUBCOMMITTEE ON THE DEPARTMENT OF THE INTERIOR AND
RELATED AGENCIES

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PART 11

	Page
Firefighting Program	1
Fish and Wildlife Service	431
National Park Service	635
Office of Water Research and Technology	1031
✓ National Endowment for the Humanities	1069
✓ Institute of Museum Services	1165
✓ Commission of Fine Arts	1233
✓ National Gallery of Art	1251
✓ National Endowment of the Arts	1271
✓ Smithsonian Institution	1415

Printed for the use of the Committee on Appropriations



WEDNESDAY, MAY 26, 1982.

SMITHSONIAN INSTITUTION

WITNESSES

S. DILLON RIPLEY, SECRETARY

PHILLIP S. HUGHES, UNDER SECRETARY

CHARLES BLITZER, ASSISTANT SECRETARY FOR HISTORY AND ART

DAVID CHALLINOR, ASSISTANT SECRETARY FOR SCIENCE

JULIAN T. EUELL, ASSISTANT SECRETARY FOR PUBLIC SERVICE

JOHN F. JAMESON, ASSISTANT SECRETARY FOR ADMINISTRATION

PAUL N. PERROT, ASSISTANT SECRETARY FOR MUSEUM PROGRAMS

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TOM L. PEYTON, DIRECTOR, OF FACILITIES SERVICES

THEODORE H. REED, DIRECTOR, NATIONAL ZOOLOGICAL PARK

JON E. YELLIN, DIRECTOR, OFFICE OF PROGRAMING AND BUDGET

THOMAS LAWTON, DIRECTOR, FREER GALLERY OF ART

INTRODUCTION OF WITNESSES

Mr. YATES. This is a hearing on the budget for fiscal year 1983 for the Smithsonian Institution, appearing are the distinguished Secretary, distinguished Under Secretary and distinguished Assistant Secretaries, along with the distinguished Treasurer and Director of Facilities Services, who is also distinguished, and the Director of the National Zoological Park, Mr. Reed, and Mr. Yellin. All distinguished men. Mr. Ripley, Mr. Hughes, Mr. Blitzer, Mr. Challinor, Mr. Euell, Mr. Jameson, Mr. Perrot, Mr. Hohenlohe, Mr. Peyton, Mr. Reed, and Mr. Yellin.

OPENING STATEMENT

Mr. Ripley has a statement which may be placed in the record at this point. Nobody new has been added to the staff whose biography should go into the record.

[The statement of Mr. Ripley follows:]

STATEMENT OF S. DILLON RIPLEY, SECRETARY
SMITHSONIAN INSTITUTION
ON APPROPRIATIONS REQUESTED FOR FISCAL YEAR 1983

First, Mr. Chairman, I would like to express my real appreciation to you and the Committee for your most understanding consideration of our FY 1982 budget request. With this understanding and through a series of reviews and cost reduction measures, we have been able to cope with our most serious financial problems. These problems stemmed mainly from the possibility that the Institution would have to absorb the full amount of the FY 1982 pay raises. For the thinned-down Smithsonian, this created a potential financial problem of \$4.6 million. Our initial response to this situation was to freeze all hiring and curtail travel and equipment purchases pending the results of a comprehensive base review. This review involved self-assessments by each of our activities of their use of resources, as well as evaluations of the value and effectiveness of our central support units. As a result of this Institutional review, we have been able to shift resources, within the limits of the reprogramming authority granted by this Committee, in order to meet the majority of our most pressing problems. Recent favorable action by the Office of Management and Budget on a supplemental appropriation of \$2.3 million, if enacted by the Congress, will allow us to fund essential hires and other necessary expenses for the balance of the year. While we have been forced, most regrettably, to limit our extended summer hours schedule in 1982 to two of our most popular attractions, the National Air and Space Museum and the National Zoological Park, and it has been necessary to curtail several of our programs, we will be able to get through the year without more drastic actions affecting public service.

FY 1983 Budget Priorities

The budget request which we are presenting to you today is a product of the Institution's response to the financial stringencies required of Federal activities. In developing priorities for the FY 1983 budget request to the Office of Management and Budget last spring, I urged the Institution's managers to concern themselves with the basic and essential care, maintenance and security of our possessions -- the 78 million works of art, technological and cultural objects, and natural history specimens that comprise the National Collections -- and our museums, galleries and other buildings that have a replacement value of over one billion dollars. This budget request specifically addresses those priorities. There is provision for significantly enhancing the protection of the collections through a comprehensive program of security improvements, including further work on the Institution's proprietary electronic security and fire alarm system. A major priority also is the continuation of a strong restoration and renovation and maintenance program that will assure the structural integrity of Smithsonian buildings. We are seeking a further increment for equipping and operating the Museum Support Center, the construction of which is presently ahead of schedule and within budget.

Construction monies are requested for the Quadrangle project whose main theme is peace through intercultural understanding. The proposed resources will be used to construct new facilities for a Center for African, Near Eastern and Asian Cultures in association with the Freer Gallery of Art and the Museum of African Art. Combined with the galleries will be temporary exhibit areas, associates activities, and seminars and discussion areas for this arc of nations from Africa to the western Pacific. The project will be jointly financed by equal shares of appropriated and nonappropriated funds.

Self Help at the Smithsonian

The joint financing of the Quadrangle construction represents one facet of the productive partnership between the Federal government and the Smithsonian's

nonappropriated resources. We are very proud of this tradition and believe it to be integral to the success of the Institution.

Over the past several years, mainly through the favorable results of our auxiliary activities, we have been able to finance, in full or in part, several programs, thereby reducing the need for federal appropriations. These are fully explained in our budget document, but a few bear repeating. Since 1978, the Board of Regents has approved the use of two million dollars a year for the Institution's Collections Acquisition, Scholarly Studies and Educational Outreach Program. We hope to be able to increase this allocation to two and one-half million dollars annually beginning in FY 1983 because of the inclusion of the Museum of African Art. Through mid-1982 over four million dollars has been expended for a total of 15 important acquisitions, including major sculptures, paintings, fossil collections, a quartet of signed 18th century stringed instruments, scrolls of Chinese calligraphy, collections of Mexican masks and of historic American printing type. Approximately two million dollars has been used to support 100 special research projects which have led to 88 publications, completed or in-progress. And \$2.4 million has supported 81 educational outreach activities that have extended the museum experience for thousands of individuals, including the disabled and the elderly.

A second program financed with Trust funds since FY 1979 is the Institution's visiting scholar and fellowship program. This program, previously supported with federal appropriations, is now funded with nonappropriated Trust funds at the annual level of \$1.1 million dollars. Smithsonian fellowships serve the national academic community and benefit the Institution's own research staff. Since 1979, 480 awards have been made to fellows from 180 colleges and universities. Intellectual exchange typically continues beyond the fellowship year, through lasting collaborations, correspondence, visits and joint publications.

In total, for FY 1983, we are forecasting that a net amount of \$15 million will be realized from our auxiliary and other unrestricted Trust fund activities. In addition to the uses described above, we expect to apply the monies toward operating allotments of the Cooper-Hewitt and other bureaus; administrative and support costs; research, exhibitions, education and other purposes of the bureaus; the Quadrangle project; and, funds permitting, the Institution's unrestricted endowment.

FY 1982 Accomplishments

In general, Mr. Chairman, with your assistance, the Smithsonian continues to be a healthy, energetic Institution as evidenced by our recent accomplishments.

Collections Management

We are pleased to report that construction of the Museum Support Center is approximately 70 percent complete. The project is on schedule toward a beneficial occupancy date of January 1983. Inventories in all museums including the special inventory programs initiated in FY 1979 at the National Museum of Natural History/ Museum of Man, National Museum of American History and the Cooper-Hewitt Museum are actively continuing in FY 1982. In each of these museums, inventory standards and methods, including data gathering and recording systems and collection condition reports, have been developed. By the end of FY 1981, the National Museum of Natural History/Museum of Man had created and computerized more than 2,500,000 inventory and catalogue records. The National Museum of American History had inventoried and created inventory records for 8,500,000 objects and the Cooper-Hewitt did the same for 134,000 objects. Following an initial completion date of June 1983, updating, reconciling, and refining the inventories will be a continuing Institutional priority.

Research

Original research in the sciences, history and art continues to form the core of all Smithsonian programs. Significant progress occurred in FY 1982 in furthering knowledge in several fields of science at the Institution. Among the more noteworthy accomplishments were the participation by two Smithsonian scientists in an expedition to Antarctica. A geologist from the Smithsonian Astrophysical Observatory and a botanist from the National Museum of Natural History spent several months in the region as part of a national team attempting to unlock the mysteries of this remote continent. Over 300 meteorites were collected and are now being analyzed. The group also brought back a collection of lichens, a plant consisting of a fungus and an algae, tolerant of harsh growing conditions. Preliminary analysis indicates that these plants may be over 10,000 years old, making them, if confirmed, the world's oldest organisms.

Utilizing data from the Einstein Satellite and observations from the Multiple Mirror Telescope, scientists at the Smithsonian Astrophysical Observatory are developing a better knowledge of the role of quasars in the solar systems. Quasars, star-like images with enormous energy output, seem to contribute significantly to the X-ray background in space. It is also possible for the first time to plot the distribution of quasars in time and space by using the Multiple Mirror Telescope. Such information is critical in developing current models of quasar evolution.

On earth, veterinarians and reproductive physiologists have made significant strides in understanding animal physiology to better care for and manage our living collections. Studies of blood sera of cheetahs in South Africa revealed a limited diversity of genetic variabilities, important because it was previously thought that genetic diversity was the rule in natural populations with wide geographic distribution. Also significant was the artificial insemination of the female giant panda. Aided by colleagues from the London Zoo, the National Institute of Health, and the Children's Hospital Medical Center, the female was inseminated during ovulation. For the first time, a panda's ovaries were observed during estrus by a laparoscope.

Continuing efforts at both the Smithsonian Tropical Research Institute and the Chesapeake Bay Center on temperate and tropical forests have yielded new data on the workings of these complex ecosystems. New efforts in the photosynthetic physiology of tropical plants are yielding important findings of the role that limited sunlight plays on plant growth on the forest floor. At the Bay Center, scientists have documented the relationship between migratory birds and their habitat requirements in the forests of the Eastern United States. More detailed studies should yield the necessary data for proper forest management that will assure genetic diversity for the survival of commercially important plants and animals.

Important history and art research efforts in FY 1982 include an archeological expedition to Kodlunarn Island on Frobisher Bay in Canada, documenting Martin Frobisher's voyages to the Canadian arctic in 1576-78 with significant new findings; an exploration of the contemporary fine arts in the State of Idaho in preparation for their possible presentation in an exhibition to be scheduled for 1983 or early 1984; an historic review of Washington, D.C. artists from 1880-1915 in preparation for an exhibition of paintings in the fall of 1983; continued research and editing toward the publication of Volume 5 of The Papers of Joseph Henry; preparation for publication of an annotated volume of "The Quartermaster's Manual of 1865;" and a study of the reed weaving technology of the Northern Paiute Indians of Western Nevada.

Notable publications in history and art so far this fiscal year include Science in America: A Documentary History, 1900-1939; The History of Science and Technology in The United States: A Critical and Selective Bibliography; a book on traditional pottery making, The Meaders Family: North Georgia Potters; a major book on an important American modernist, Ashile Gorky: The Implications of Symbols; studies of Islamic celestial globes and the pipe organs of Mexico City cathedrals; More than Meets the Eye, a comprehensive history of the Cooper-Hewitt collections; a study of "Kuba" art (from Zaire); the volume Masterpieces of Chinese Calligraphy in American and European Collections; an updated "Illustrated Checklist" of the National Portrait Gallery's permanent collection; and Esin Atil's book, Kalila wa Dimna: Fables from a Fourteenth-Century Manuscript and the catalogue "Renaissance of Islam: Art of the Mamluks" from the exhibit that was displayed in the Evans Gallery at the National Museum of Natural History.

Exhibitions

There have been several popular exhibition openings this past fiscal year. Among them is the renovated Dinosaur Hall at the Natural History Museum, which is proving to be a most entertaining and educational exhibition. Special features include a time column with illustrations depicting the story of evolution, a giant flying reptile called a pterosaur with a forty foot wingspan, and monoliths, stationed on the upper level, that illustrate the use of fossils in industry. The monoliths and other exhibits on that level were paid for by funds donated by the corporate sector.

Our Thomas M. Evans Special Exhibits Gallery in the Natural History Building opened on July 8, 1981 with the exhibition "5000 Years of Korean Art." This outstanding show was followed by the "Hopi Kachina Spirit of Life" exhibition which interpreted the unique culture, religion and philosophy of the Hopi people; and smaller exhibits on deep ocean photography and a collection of works by Edward Curtis. Scheduled for June 1982 is a fascinating show on the Bering Strait Eskimo which will contain approximately 500 objects collected during the 1880s by Edward William Nelson, a museum collaborator with the Natural History Museum. These and other shows, made available partially through outside funding, are affording our visitors the opportunity to view varied and exciting exhibitions that would not have been possible without the Evans Gallery.

With support from appropriated funds totaling \$750 thousand in FY 1981 and \$840 thousand in FY 1982 the "Major Exhibition Program" opened two exhibitions this year. The first of these "George Washington, A Figure Upon the Stage," occupies 9,000 square feet of exhibit space at the National Museum of American History. It commemorates the 250th anniversary of our first President's birth by bringing together over 600 objects that help recapture a sense of his life and the manner in which the American people viewed his character and appearance.

The other "major exhibition" entitled "Celebration: A World of Art and Ritual," currently is at the Renwick Gallery. The numerous striking and exquisite objects assembled for this show from nine Smithsonian museums illustrate a rich diversity of ceremonial and ritual events and the forces that move humankind to celebrate.

Supplemental appropriations provided by the Congress in FY 1981 made possible eight exhibitions commemorating the centennial of Franklin Delano Roosevelt's birth. The most extensive of these, featuring paintings and memorabilia from Smithsonian collections, as well as objects loaned from other Institutions, is located in space opposite the George Washington show in the National Museum of American History. Additional programs include free film theater activities, lecture series and an architectural walking tour sponsored by the National Building Museum and our National Museum of American Art. These and other special events sponsored by other organizations provide a fitting commemoration of this occasion.

FY 1983 Budget Request

Now I would like to summarize and highlight our FY 1983 budget request by appropriation account.

Salaries and Expenses

The Institution's request for the Salaries and Expenses appropriation for FY 1983 totals \$144.1 million which is an increase of \$11 million over the FY 1982 base. Nearly one-half of the proposed increase, \$5.2 million, is for items that are generally beyond our control, including utilities, communications and rent, legislated pay and inflation. A further amount of \$1.1 million is sought to support the 69 positions approved by the Congress after they had been eliminated in the March 1981 budget amendment.

The remaining amount of \$4.7 million is designated for essential purposes consistent with our theme of care and maintenance of the collections. These consist of upgrading safety and security equipment, continuing the phased programs of equipping and operating the Museum Support Center and providing adequate maintenance of Smithsonian facilities.

The care and protection of the museums and National Collections is a major priority and concern. During the past year, our Office of Protection Services conducted an extensive survey of all Smithsonian museums and facilities. The results indicate that there are areas where security coverage is not adequate and opportunities exist for theft, break-ins or vandalism. Findings also show that security systems in some Smithsonian facilities are obsolete or function poorly. Some areas have only lock and key arrangements, providing minimum security; other areas of nonpublic space are not monitored at all which could lead to unauthorized entrance. To initiate a comprehensive plan designed to correct our security deficiencies, we are seeking an amount of \$1.7 million in FY 1983.

A key part of the upgraded protection program is the conversion to a proprietary alarm system that is owned and operated by the Smithsonian. This system would ensure faster response times to fire and security alarms, improve the quality of vital information transmitted from the scene and eliminate the reliance on leased equipment. The Institution has been working toward this conversion since 1975.

Another critical security need addressed in this budget is the replacement of outmoded security equipment, including alarm and fire sensor devices for exhibit cases in public areas. Moreover, closed circuit television cameras for non-public and public areas are required as are security and alarms equipment that will deter theft and detect fire in storage areas where 90 percent of our holdings are located.

Under the category of safety, an additional \$152 thousand is proposed to augment the Institution's effort to convert potentially fire hazardous cellulose nitrate negatives to archival quality safety film.

For the Museum Support Center, we are requesting a total amount of \$6.7 million to continue the phased program of equipment purchases to initiate the move of collections and to provide basic operating capability when the Center is completed in early 1983. This represents a \$2.2 million increase over the FY 1982 base.

To date, an amount of \$5.3 million has been appropriated for storage equipment. The bidding process for this equipment which is divided into "wet" storage (collections stored in alcohol or formaldehyde solutions) and modular storage is on track. After some initial difficulty with the first bid for the "wet" storage component, a new invitation for bid was issued on May 5, with a bid opening date of July 6, 1982. Bid invitations for the modular storage component will be issued during the summer. An additional increment in FY 1983 will permit the continued purchase of equipment in order to accommodate the schedule of collections relocations. The first of these, to be moved in 1983, will be the fluid collections from the Oceanographic Sorting Center. Presently occupying leased space, the move of the Sorting Center will free up funds that will be applied to equipment purchases. Also in 1983, collections from the invertebrate and vertebrate zoology departments and the medical program of the entomology department will be transferred to the MSC. In 1984, the schedule calls for the move of collections from the botany, entomology and anthropology departments.

With funds of \$1.75 million appropriated in FY 1981 and FY 1982, the Institution has initiated purchases of laboratory and other equipment for the scientific departments and organizations that will have components at the Center. These essential purchases will be continued with funds sought in FY 1983.

With base funding of \$187 thousand for conservation and library functions, an additional amount of \$2.3 million also is requested for basic operating expenses consisting of support costs of building and grounds maintenance and protection, conservation and fumigation supplies, and estimated utilities costs. Also included are monies for the initial relocation of the collections.

It will be necessary to begin to staff the Museum Support Center with support personnel during FY 1983. A careful examination of staffing requirements has indicated that 66 positions will be needed in FY 1983; the part-year cost of these positions is estimated to be approximately \$1.0 million. The preferred approach to meet this need is to reprogram existing vacant positions throughout the Institution to the Center. Direct contracting for Museum Support Center positions has been considered and rejected. Given the importance of this new building to the Institution, and its complex and sensitive environmental and prototype security equipment, we are convinced that it would be best to operate, maintain and protect it with our own employees at least for an adequate initial period.

At present the principal source of funds for staffing is the Museum Support Center equipment account. An amount of \$4.2 million is sought for this purpose in FY 1983. We are presently determining how much of this might be reallocated for staffing. That amount will depend on the quantity of storage and other equipment that can be purchased in FY 1982 and what the requirements are in FY 1983 and early FY 1984 for the transfer of museum collections into the Center. We anticipate, however, spending about \$785 thousand of the equipment in FY 1983 for staffing needs in addition to approximately \$250 thousand of funds designated for the move of the collections. If it is determined that these amounts cannot be spared, we would look to other sources of funds in order to assure the timely occupancy of the Museum Support Center and efficient and effective operations.

Lastly, in the S&E appropriation, we are requesting an increase of \$650 thousand to allow our Office of Plant Services to meet its basic operating and maintenance obligations for virtually all of the physical plant.

Restoration and Renovation of Buildings

For the Restoration and Renovation of Buildings Appropriation, we are seeking an amount of \$8.45 million, a \$770 thousand increase over the FY 1982 appropriation. In keeping with the priorities of our FY 1983 request, we are firmly committed to devoting ample resources toward the maintenance of our physical plant.

During the past year, we have made considerable progress with our roof and facade repair, exterior, fire detection, utility systems, safety and security, and disabled access programs. For example, roof replacement of the American Art/Portrait Gallery Building is being completed; the first phase of a multi-year repair and restoration of the roof and exterior facade of the Arts and Industries Building is being started and repairs to the Smithsonian Institution Building's roof and gutter system are being completed. Steady progress has been made in the phased program of correcting fire detection and suppression deficiencies in the Natural History and American History Buildings. Heating, ventilating and air conditioning (HVAC) upgradings are being accomplished at the Freer Gallery of Art, where the first phase of a three year project has been completed and the second phase started; at the American Art/Portrait Gallery Building where energy conservation measures are being implemented with the replacement of aging air-conditioning equipment; and at the Museum of American History where mechanical components that are beyond repair are being replaced. A major project was completed at the American Art/Portrait Gallery Building where asbestos bearing insulation was removed and replaced with non-carcinogenic material. We are very proud of the results of the Hirshhorn Sculpture Garden improvements which include ready access for the disabled.

A portion of the monies in this account is used for projects in support of research, collections management and education at the Institution's outlying facilities. In this category, with the reprogramming approval of this Committee, we were able to award a construction contract in November 1981 for the development of a research library at the Smithsonian Tropical Research Institute in Panama.

Included in our budget justification this year is a report of physical plant condition by facility which details the Institution's restoration and renovation plans over the period FY 1983 - FY 1987 as shown in our Five-Year Prospectus.

For FY 1983, we plan to move ahead with the major phased projects on roofs and facades, utility systems, and safety and security. We also are seeking resources to correct smaller problems before they become major and to complete two projects at outlying facilities.

Specifically the major purposes for which resources are sought in FY 1983 include continuation of roof and facade renovation of the historic Arts and Industries Building, renovation of the Renwick Gallery Building's facade, and initiation of roof and facade repairs to the National Air and Space Museum. There is provision also for further upgrading of fire protection systems following the fire protection master plans of the American History and Natural History Buildings. In the utility systems category major funding is being sought to complete the HVAC renovation at the Freer and to continue HVAC upgrades at the American Art/Portrait Gallery Building, the American History Building and the Arts and Industries Building. We are requesting additional resources in this category also to initiate replacements and renovations for the components in the Natural History Building.

Under the rubric of safety and security, a major project planned for accomplishment over the next decade is the conversion to an electronic security and fire alarm system that is owned and operated by the Smithsonian. I have previously discussed the need for conversion to this system in the Salaries and Expenses portion of this statement. The monies for this project sought in the Restoration and Renovation account will be used to fund building modifications and permanently installed equipment.

Zoo Construction

Our Zoo construction request for FY 1983 of \$1.55 million focuses mainly on renovation and repairs. We are seeking an amount of \$1 million for the repair program at Rock Creek and \$200 thousand for general repairs at the Conservation and Research Center in Front Royal, Virginia. As a continuation of Master Plan development at Rock Creek, we are requesting a sum of \$350 thousand for the planning and preliminary design of the Olmsted Walk Exhibits projects. These consist of a series of small exhibits planned for the Connecticut Avenue pedestrian and vehicle entrances, as well as along the central walkway.

Quadrangle

Culminating several years of planning, we are seeking an appropriation of \$36.5 million in FY 1983 for development of the Quadrangle --an area of 4.2 acres of land bounded by the Smithsonian Building, the Arts and Industries Building, the Freer Gallery of Art and Independence Avenue. Construction costs will be \$75 million. One-half of this amount, or \$37.5 million, is sought from federal appropriations. The other half will come from voluntary contributions of individuals, corporations, foundations, foreign governments and related organizations as well as the Institution's own resources.

The Need

In our view, there is an overwhelming need to provide a window on the National Mall for non-Western civilizations and their dynamic traditions, cultures and history. Together these civilizations encompass two-thirds of the world's population. The Quadrangle, a center for non-Western cultures, is our response to this need.

The Smithsonian's interest in these civilizations is by no means new. For many decades Smithsonian archeologists and ethnologists have worked in these areas; our Freer Gallery is the most important museum in America specializing in the art of the Near East and Asia; and recently we were pleased to accept from the Congress responsibility for the National Museum of African Art. But just at the time when an understanding of non-Western cultures has assumed new urgency, we have come to realize that our existing facilities are inadequate to meet this

need: the Freer Gallery desperately needs more space for its own programs, the National Museum of African Art needs and deserves modern facilities among the other Smithsonian museums on the Mall, and the Smithsonian as a whole needs facilities in which the achievements of all non-Western cultures can be studied, discussed and exhibited.

The new center will give our 25 million visitors each year an awareness of and appreciation for the great cultural achievements of the peoples and civilizations of Africa, the Near East and Asia.

Questions

Two main questions have been expressed. These revolve around our ability to finance one-half of the construction costs from nonappropriated sources and our ability to assure that project costs will not exceed \$75 million. These are important questions and ones that we have taken very seriously. I would like to outline for the Committee the measures we are taking to assure that we will in fact raise fifty percent of the costs and that we remain within the \$75 million estimate.

Status of Fund Raising

We are firmly committed to meeting one-half of the cost of the Quadrangle from nonappropriated sources, including contributions from other governments, foreign and domestic corporations and individuals. To date, we are nearly three-quarters of the way toward our goal, with approximately \$26.6 million in-hand or pledged from other governments, foreign and domestic corporations, foundations and individuals and the Smithsonian's Trust funds. To help assure that we meet our goal, we have engaged the firm of Brakeley, John Price Jones Inc. who, in association with our Development Office, is helping to organize domestic and international fund raising campaigns. On the domestic front, we are very fortunate to have had a corporate campaign under the leadership of William Anderson, who is Chairman of the NCR Corporation and also former Chairman of the National Board of Smithsonian Associates.

Cost Estimating

To help ensure that the bids for the construction contract fall within the \$75 million, we have required the architectural design firm to engage an independent cost consultant firm to estimate and monitor project costs. In addition, the Institution has hired a cost consultant to prepare independent estimates. With these two independent estimates in hand, we are confident that we will have the necessary information to control the development of the project within available funding.

Status of Design

The architectural design for the Quadrangle was originally conceived by the internationally known Japanese architect, Junzo Yoshimura. Since then, the principal design partner of the Boston firm of Shepley, Bulfinch, Richardson and Abbott has developed site and building plans. These have been approved by the National Capital Planning Commission and the Commission of Fine Arts. We also have successfully completed all requirements of the National Environmental Policy Act and the National Historic Preservation Act. Using the FY 1982 appropriation of \$960 thousand, working drawings will be completed this summer which would permit a solicitation for construction bids to be initiated in October 1982.

Authorization

Authorizing legislation providing for construction funding of \$36.5 million has been introduced by the Congressional members of the Smithsonian's Board of Regents and referred to the Committee on Rules and Administration in the Senate and the Committee on Public Works and Transportation in the House. Hearings were held on April 20th in the Senate and on April 27th in the House. On May 13th, the House Committee on Public Works and Transportation enthusiastically recommended authorization of the proposed amount for construction; equally favorable action followed in the Senate on May 20th .

Special Foreign Currency

Our request for the Special Foreign Currency Program is \$2,000,000 in foreign currencies. Funds for this program will be used to continue a program of grants to United States institutions where excess currencies are available primarily for research and professional training in fields of traditional Smithsonian competence.

Mr. Chairman, I and my staff will be pleased to respond to your questions and those of the Committee.

Mr. YATES. Do you want to tell us about the state of the Smithsonian, Mr. Hughes?

Mr. HUGHES. I would be happy to start that process, Mr. Chairman. I would suggest that for any more or less complete statement we await the Secretary's arrival.

For my part I would simply like to express our appreciation for your past consideration. We have survived 1982 reasonably well with your help and cooperation. We hope and expect we will be able to continue to do that.

Mr. YATES. Have you not flourished? Have you only survived?

Mr. HUGHES. We have survived. We are on essentially a maintenance basis, as I would see it, within the Smithsonian. We are holding our own. I think we are safeguarding the collections. We are attempting to maintain the level of service to the public as best we can. We are not expansive.

Mr. YATES. Are you gathering weeds or flowers?

Mr. HUGHES. We are gathering flowers, but those are flowers planted over a period of time. We are not gathering new flowers.

Mr. YATES. I don't like to receive the impression that the Smithsonian has its back to the wall.

Mr. HUGHES. I did not mean to give that impression. I am trying to say maintenance as distinguished from expansion.

Mr. YATES. Then you don't want to build a quad then, isn't that right?

Mr. HUGHES. That is right. We are talking about present circumstances and our conditions coming off of 1982. With respect to fiscal year 1983, Mr. Chairman, for salaries and expenses, which may be a suitable starting place, we are requesting a total of \$144.1 million, which is an increase of \$11 million over the 1982 base. One half of the proposed increase is for "uncontrollable" items, utilities, communications and rent, legislated pay and inflation.

An additional amount of that increase of \$1.1 million is to support the 69 positions that the Congress approved after they had been eliminated in the 1981 budget amendment. The remaining \$4.7 million that we are proposing for 1983 is designated for essential purposes consistent with our theme of care and maintenance of the collection. These include updating the safety and security equipment, continuing the phased programs of equipping and operating the Museum Support Center and providing adequate maintenance of Smithsonian facilities.

PROPRIETARY ALARM SYSTEM

A key part of the upgraded and improved protection program is the conversion to a proprietary alarm system that is owned and operated by the Smithsonian. Safety and security of the collections are of the utmost concern to us.

The new system, the proprietary system, will have several benefits. First it will assure faster response times to fire and security alarms. It will improve the quality of information transmitted from the scene and eliminate the reliance on leased lines and equipment. The Institution has been working toward this conversion since 1975.

MUSEUM SUPPORT CENTER CONSTRUCTION SCHEDULE

For the Museum Support Center, which is presently ahead of schedule, we are requesting a total amount of \$6.7 million, a \$2.2 million increase over the 1982 base. This sum will be used to continue the phased program of equipment purchases to initiate the move of collections and to provide basic operating capability when the Center is completed in early 1983.

Mr. YATES. How early in 1983? What is your tentative opening date?

Mr. PERROT. We expect to take occupancy on January 9, 1983, and within the following month to start moving the collections, as soon as the proprietary security system is installed, which may be May or June.

MUSEUM SUPPORT CENTER STAFFING NEEDS

Mr. HUGHES. Our budget request indicated the Institution is in the process of examining the means by which the Support Center could be staffed. A careful examination of requirements indicates 66 positions will be needed in 1983 at a cost of approximately \$1 million. We have concluded that the preferred approach to meet this need is to reprogram existing vacant positions throughout the Institution to the Center. Direct contracting for Museum Support Center positions has been considered and rejected.

Given the importance of this new building to the Institution and its complex and sensitive environmental and prototype security equipment, we are convinced that it would be best to operate, maintain and protect it with our own employees, at least for an adequate initial period.

Mr. YATES. Does OMB say you can't have your employees?

Mr. HUGHES. They rejected additional slots for the Museum Support Center positions.

Mr. YATES. How many?

Mr. YELLIN. We asked for 99 from OMB and feel we can get by with 66 for part of the fiscal year 1983, and that number would increase for 1984.

Mr. YATES. How many do you need to care for this building adequately, 99?

Mr. YELLIN. Eventually about 114 for 1984.

Mr. YATES. You are going to be moving in in June, which means three-quarters of the year will have passed, so will you need the full 66?

Mr. HUGHES. We are speaking of slots, not workyears. The positions we contemplate are 66.

Mr. YATES. What did OMB tell you? How does OMB propose that you operate the facility?

Mr. HUGHES. I am not sure what they propose but they appear to contemplate our operating by reprogramming and reshuffling positions within the Institution.

Mr. YATES. Will you be able to do that?

Mr. HUGHES. As set forth here, we are going to endeavor to do that. That is the only option which we have.

Mr. YATES. How overly staffed are you in other places?

Mr. HUGHES. We are not overly staffed in other places but we are robbing Peter to pay Paul.

Mr. YATES. What is Peter going to do?

Mr. HUGHES. He is going to struggle harder.

Mr. YATES. Are you taking them out of the Judge's office?

Mr. HUGHES. The Judge hasn't a significant number of positions to contribute, or we might.

Mr. YATES. Is there another Peter in your organization?

Mr. HUGHES. There are a lot of slots within the organization. None of them do we regard as surplus, but under the circumstances we feel it is appropriate to reprogram rather than to try and contract for the operations of the Support Center.

FUNDS FOR STAFFING MUSEUM SUPPORT CENTER

Mr. YATES. Finish your statement and then we will go into it.

Mr. HUGHES. Very well, sir.

At the present time, the principal source of funds for staffing is the Museum Support Center equipment account. An amount of \$4.2 million is sought for this purpose in fiscal year 1983. We are determining how much of this might be reallocated for staffing. That amount will depend on the quantity of storage and other equipment that can be purchased in 1982 and what the requirements are in 1983 and 1984 for transfer of museum collections to the Center.

We anticipate spending about \$785,000 of the equipment monies in 1983 for staffing needs in addition to approximately \$250,000 designated for the move of collections. If it is determined that these amounts cannot be spared, we would look to other sources of funds in order to assure the timely occupancy of the Support Center and its efficient and effective operation.

RESTORATION AND RENOVATION OF BUILDINGS REQUEST

For the restoration and renovation of buildings appropriation we are seeking \$8,450,000, a \$770,000 increase over the 1982 appropriation. In keeping with the priorities of our 1983 request we are firmly committed to devoting ample resources toward the maintenance of our physical plant.

For fiscal year 1983 we plan to move ahead with the major projects on roofs and facades, utility systems and safety and security. We also are seeking resources to correct smaller problems before they become major and to complete two projects at outlying facilities.

Included in our budget justification this year is a report of physical plant condition by facility, which details the Institution's restoration and renovation plans over the period 1983-1987 fiscal years, as shown in our 5-year prospectus.

Mr. YATES. Mr. Ripley, we are delighted to welcome you. Your statement has been made a part of the record. I have asked Mr. Hughes, in your temporary absence, to give us a statement on the condition of the Smithsonian, and he has done very well.

However, of course, we always look to the summit for the principal statement, so we will be very glad to hear what you have to say. We know that you know a little bit about the Smithsonian.

Mr. RIPLEY. Thank you very much, Mr. Chairman. I am sure Mr. Hughes has already more than detailed the pleasure that we feel in coming before you annually—

Mr. YATES. Not really. We could use a little more of that.

Mr. RIPLEY. I don't know whether it is such a pleasure for you to have us come up with a dreary account every year.

Mr. YATES. You struck the same kind of a note, and a kind of unhappy note. You said, "a dreary account." We always look forward to it as being a joyous occasion.

Mr. RIPLEY. I am delighted.

Mr. YATES. Mr. Hughes has talked about an atmosphere of the Smithsonian which was somewhat strange, almost one of having your back to the wall. He moved away from that when I called him on it, but you are sounding the same note with the use of the word "dreary." I thought I would catch you just as you took off.

Mr. RIPLEY. I would like to say how much we appreciate coming here because of the very understanding treatment that we have had from your committee through our fiscal year 1982 budget request. We have been working very hard to try to save money, as has everybody. As you know, I rather bored you last year by saying we were good soldiers and we would take our medicine. But in any case, we have been trying to be very prudent and work over the essential problem for our budget this year, which is to take care of essential care, maintenance and security of the collections and our buildings.

We were very appreciative last year for the detailed examination your committee made of maintenance of the buildings.

Mr. YATES. There is still a note missing here, and I don't think we caught it in Mr. Hughes' presentation, either. You talk about taking care of the collection and the buildings, and so forth. Neither of you have addressed the attention to the public. Will you go into that?

Mr. RIPLEY. I certainly will.

Mr. YATES. I think that is a very important part, and I wonder about how many hours you are going to stay open, and how many evenings you are going to stay open, and whether or not these beautiful collections of which you are taking such care are being shown to the public.

Mr. RIPLEY. I believe we can answer that very well. Would you like me to speak to that right now?

Mr. YATES. Sometime in the course of your presentation.

MUSEUM SUPPORT CENTER

Mr. RIPLEY. Our main effort this year in the budget itself is to emphasize the problems of finishing up what is very important for us, the Museum Support Center. We know how much your committee helped us along the line with this and in this connection, as you know, also, you have been giving us support for the inventory of the collections. Consequently a good part of our effort has been directed toward the inventory, the equipping of the eventual building when it will be given to us in 1983 and of the problems of moving the material over for study and moving staff.

QUADRANGLE PROJECT

Those are problems which we are facing along with all the others. Of course we also have the goal that you know about very well, and that is the request this year for a major financing of our quadrangle project.

Mr. YATES. Mr. Hughes already said you are not interested in this. He said you are interested just in maintaining your present posture.

Mr. RIPLEY. Well, I am adding that because it is in our budget. Lo and behold it is in our 1983 budget, and it is hard for me to overlook it, particularly when I am out every day on the stardust trail trying to raise the private side which has to match the funds for the construction on the Federal side. This is a major effort of ours and one which I would not neglect.

The effect on the public of this building will be incalculable I believe, because it will be the only real structural arm of our Government effort to educate people in this country about the 92 nations that occupy the whole area from Asia right across to Africa and across to the Southwest Pacific, whose people are more than half of the population of the world; and also to provide them, many of them very small struggling new countries, with some sense of pleasure and self-respect that their culture and their traditions are being shown here in the middle of the Mall in Washington, D.C.

There has been far too little of this kind of interplay in our own international attitudes and we feel very firmly, as you know, Mr. Chairman, that this is one of the ways in which the Smithsonian can play its part in improving international understanding and leading indirectly perhaps toward the more peaceful approach to maintenance of foreign relations.

To this effect, members of the Administration have been sympathetic, and indeed friendly, in endorsing this concept, and that I think is quite clearly one of the reasons why it has been included in the 1983 budget.

CURTAILMENT OF SUMMER EVENING HOURS

In the meantime, I can assure you that our approach with the public continues to be very favorable. Although we have reported to you that we have had to reduce evening hours in all except two of the most popular institutions that we oversee—the Zoo on the one hand, and the Air and Space Museum on the other—we have had no significant public disapproval of this program and we are very pleased with that. And we have kept you and your committee in touch with the progress of that somewhat small slowdown in our openings to the public.

The general maintenance of the public——

Mr. YATES. May I ask you a question at that point? The Air and Space Museum and the National Zoo are open in the evenings. Are they open every evening?

Mr. RIPLEY. Yes, they are open at the regular times that we otherwise would have had all of the buildings open.

Mr. YATES. During the whole year?

Mr. RIPLEY. No, only during a period from April 1 until Labor Day. Those are the summer hours so-called, the summer evening

hours, which presented a certain obvious problem to us in our reduced budgetary situation.

Mr. MURTHA. Are you saying you had to change the hours?

Mr. RIPLEY. We had to cut out the evening hours during which we normally stay open during the summer, so all the museums with the exception of the Air and Space Museum, which is by far the most popular in the world, as you know, and the Zoo, which is the second most popular attraction. And we haven't had any adverse reactions to this, strange as it may seem. The public seems to understand very well our explanation of the stringency of our budget.

DAYTIME VISITOR ATTENDANCE

Mr. MURTHA. Have you had an increase in visitors during the daytime?

Mr. RIPLEY. We seem to be maintaining our attendance very well. I was quite interested last weekend when I was in New York and somebody said, "Oh, I hear repercussions of the fact that your attendance is down at the Air and Space Museum." I said, "It is not down. It was down a little bit about a month and a half ago, but it has picked right up and it is maintaining its normal flow right now."

In the last 2 years, perhaps, some of the—what shall we say—the novelty of the Air and Space Museum may have worn off a bit. It was brand new in 1976 and it has had the biggest attendance of any single institution in the world, and attendance is still near 8 million, which is more than the largest popular attendance known elsewhere in the world. But it is a little down from the 10 million or so that it was several years ago.

Mr. YATES. Would that include the National Gallery?

Mr. RIPLEY. No, sir, that is one institution by itself, the Air and Space Museum.

Mr. YATES. I notice in your chart on E-2 where you have all the museums that are part of the Smithsonian, listing their visitations, you haven't included the East Building or the National Gallery.

Mr. RIPLEY. No, sir. We let them explain their wonders to you directly.

Mr. YATES. I thought they were part of the Smithsonian.

Mr. RIPLEY. They are a bureau of the Smithsonian and we would be happy to include them if you feel that would be better.

MAINTENANCE OF BUILDINGS

Our basic responsibility, then, is to explain that we are, we believe with your help, maintaining ourselves very well in this present posture.

Mr. MURTHA. When you say "maintaining yourselves in this posture," the chairman asked about the people. I am also concerned about the maintenance. Not only of the valuable collections but also of the buildings. Now you had to cut back someplace. In the long run is this going to cost us more money by cutting back in the short run or are you really able to maintain things satisfactorily?

Mr. RIPLEY. We are stretched and I think in the long run it will inevitably cost more money. It is all dependent upon some kind of

crystal balling about inflation for the future and what salary scales are going to do.

As you note from our budget this year almost half of the increase that we are requesting, as usual, is for the increase in utilities, built-in salary increases and things which are absolutely unavoidable for us.

Mr. MURTHA. You are saying that you are cutting back on maintenance which you can get by with perhaps for a period of time, but your scheduled maintenance then is going to eventually catch up with you and either your collections deteriorate, or your buildings deteriorate or it will cost a lot more money down the road.

Mr. RIPLEY. That is the reason, perhaps, that I emphasize the fact we are taking care, as we think is appropriate right now, of the preservation and maintenance of the collections and the security problems that are associated with them. But we visualize there will be stretching very soon, especially when we have to supply a new building, for which we lack 66 positions presently.

Mr. MURTHA. Mr. Hughes had just started to explain that. I don't see how you can do it. I don't see how, if you request X number of positions and you are given fewer, that you can maintain them adequately. In the long run it is beginning to cost more money for the Government or they are going to deteriorate substantially, one or the other.

CURTAILMENT OF SUMMER EVENING HOURS

Mr. HUGHES. May I take a run at that, Mr. Murtha? One of the reasons that we have not maintained the summer hour schedule as we normally have in past years is to provide some of the slots necessary to maintain the buildings and to staff the Museum Support Center. It is a little hard to tell where we are going to get all these bodies from when the time actually comes. But one of the reasons for not opening the museums in summer hours in the evening is to save those slots and to provide them for maintenance.

The museums are open every day of the year except Christmas; every day, and of course in summer that includes from 5:00 until 9:00 in the evenings.

There are some difficult choices to be made in deciding just where one can rob Peter to pay Paul and at the same time maintain the level of public service without borrowing against the future. We feel that the compromises that we have made will avoid serious impairment of the maintenance of the facilities and of the collections and at the same time will provide adequate protection.

Mr. MURTHA. Since you are keeping the Zoo and the Air and Space Museum open, people can go to the other facilities in the daytime and catch these in the evening; so really, at this point, you feel you are all right?

Mr. HUGHES. We certainly have that feeling. The Air and Space Museum evening attendance figures reflect the fact that people are going there in larger numbers than in previous years; and I believe the Zoo, also, although I don't have those numbers at hand. In any event, the Air and Space Museum figures reflect that. And I have been somewhat surprised there have not been more complaints over the elimination of summer hours, but we have had very few.

We advertised it rather widely and perhaps that helped. In any event, so far, so good.

Mr. JAMESON. We thought it would be a lot less disruptive to the public, Mr. Murtha, to scale back a bit on the evening hours than to do anything to tamper with the daytime hours because our traditional 10:00 to 5:30 is so well known across the country. For example, many school tours from outside of Washington arrive on our doorsteps at 10:00 o'clock in the morning.

Mr. RIPLEY. It is true that it is hard, for example, at the Zoo, as I know from personal experience, walking around amongst the buildings, to make sure that every last paper cup and every single abandoned chewing gum wrapper has been picked up. And I have often thought that the Zoo's appearance would be greatly approved if we could close, let's say Monday, or something of that sort, and have a pick-up day because of the amount of debris. The more people that come, the more carelessness occurs and the more people avoid the possible overflowing trashcans, and this always upsets most of us very much. Because you find that the cleaner and tidier you keep things, the cleaner and more tidy people feel as they walk about to look at the exhibits.

However, it is very stretched right now and will be for the foreseeable future, as I see it, Mr. Murtha.

ZOO CONSTRUCTION REQUEST

If I could just speak briefly about construction, Mr. Chairman, I could conclude my opening statement by telling you that in the 1983 request we are asking for \$1.55 million for renovation and repairs in the Zoo. We are seeking an amount of \$1 million for the repair program at Rock Creek and \$200,000 for general repairs at the Conservation Center in Front Royal, Virginia.

As a continuation of the master plan development at the Rock Creek Park, we are requesting \$350,000 for the planning and preliminary design of the Olmsted Walk Exhibits project. That is the formal entrance off Connecticut Avenue. These consist of a number of small exhibits planned near Connecticut Avenue pedestrian and vehicle entrances as well as the Olmsted Walk.

QUADRANGLE FUNDRAISING

For the Quadrangle, we are seeking an appropriation of \$36.5 million in 1983 for development of the area, as you know, of something over 4 acres of land surrounded by the Smithsonian Building, the Arts and Industries and the Freer Gallery of Art and Independence Avenue. We are firmly committed to the construction cost figure of \$75 million. One-half of this amount, or \$37.5 million, is being sought from Federal appropriations. That includes \$960,000 granted by this committee last year for planning. And the other half will come from voluntary contributions of individuals, corporations, foundations, foreign governments and related organizations, as well as the Institution's own resources.

With the help of the planning appropriation of last year, as well as our own funds, we anticipate that working drawings will be completed very soon, well before the end of the calendar year 1982,

and a fixed price construction contract for the whole construction can be awarded at the end of this calendar year.

Our fundraising has proceeded remarkably well in the time since I have last been here to testify before you. We have contributions from other governments, foreign and domestic corporations and individuals, to date representing approximately three-quarters of the way toward our goal. Approximately \$26.6 million is now in hand or pledged from other governments, foreign and domestic corporations, foundations, individuals and the Smithsonian Trust fund.

Mr. YATES. How much of that is in hand?

Mr. RIPLEY. I can give you the figures, Mr. Chairman. As of May 18—I'm sorry, it isn't right up to date today, but this is last week. Cash and pledges totaled \$26.6 million, consisting of \$15.8 million of cash in hand or planned from future Trust fund transfers, including the future sale of the property of the Museum of African Art, and \$10.8 million from other sources.

Mr. YATES. How much do you estimate the Museum of African Art will bring?

Mr. RIPLEY. Approximately \$2 million.

Mr. YATES. Is that in the form of an appraisal or guess? How do you know it will bring \$2 million?

Mr. RIPLEY. If it brings \$1.8 million, we won't be surprised. We get independent appraisals.

Mr. YATES. That is what I am trying to find out.

Mr. HOHENLOHE. There was an appraisal done 2 years ago that if escalated to fiscal 1985 reflects a value of \$2 million.

Mr. YATES. So you have \$15.8 million in cash. Does that include the Douglass property?

Mr. RIPLEY. That includes the proposed sale of the African Museum properties, but not the Frederick Douglass House, which we hope can be maintained as a historic residence.

Mr. YATES. You have \$15.8 million in cash and \$11 million—

Mr. RIPLEY. \$10.8 million in pledges and, as you said the other day, Mr. Chairman, I hope nobody is going to run away with the budget.

Mr. YATES. How much of the \$10 million is from foreign governments? Of the \$10 million budget?

Mr. RIPLEY. About \$7 million at the present time. Something over \$7 million, about \$7.3 million. The money in hand, of that, is somewhat over \$2 million.

Mr. YATES. Very well. Continue, Mr. Ripley.

QUADRANGLE AUTHORIZATION

Mr. RIPLEY. We have had authorizing legislation providing for the construction funds of \$36.5 million introduced by congressional members of the Smithsonian's Board of Regents and referred to the Committee on Rules and Administration in the Senate and the Committee on Public Works and Transportation in the House. Hearings were held on April 20 in the Senate and on April 27 in the House. I am happy to report that on May 13 the House Committee on Public Works and Transportation enthusiastically recommended authorization of the proposed amount for construction and reported it out to the floor, and equally favorable action followed in

the Senate on May 20. So that is the status of our authorizing legislation.

SPECIAL FOREIGN CURRENCY PROGRAM REQUEST

We have a request in for the special foreign currency program of \$2 million in excess currencies. Money for this program will be used to continue a program of grants to United States institutions where excess currencies are available, primarily for research and professional training in fields of traditional competence of our own Institution.

We will be very happy, Mr. Chairman, to join in responding to your questions.

REVISED REQUEST TO OMB

Mr. YATES. You asked OMB for \$212 million and then you made a revised request to OMB. Now what was the reason for the revised request which was approximately \$8 million?

Mr. YELLIN. At the time there was some question about what our base would be and the lower request reflects a revised lowered base from OMB which included a 12 percent reduction.

Mr. YATES. What was eliminated? Various programs were reduced by \$8 million, were they not?

Mr. YELLIN. Yes, sir. Because of the lower base, the actual reduction was \$3.3 million.

SCIENCE REDUCTION

Mr. YATES. Your science program is reduced from \$50 million to \$47 million. What was cut out?

Mr. CHALLINOR. Equipment purchases in support of research, funds in support of exhibitions and maintenance items.

Mr. YATES. How badly were you hurt?

Mr. CHALLINOR. We had to cut back on research that had been planned.

Mr. YATES. Such as what?

Mr. CHALLINOR. One of the things we had to do was equipment dealing with research—

Mr. YATES. Do you mean you had to eliminate purchase of equipment?

Mr. CHALLINOR. Unable to buy it, yes, Mr. Chairman. Postponed purchase.

Mr. YATES. What kind of equipment?

Mr. CHALLINOR. Computer equipment dealing with assessing environmental effects in Panama and at our research center in Maryland. There was equipment at the Museum of Natural History involved in analyzing specimens there. Some of this was recovered, but these are the kinds of things we had to cut back.

Mr. YATES. Will these cuts stop your inventorying from proceeding?

Mr. CHALLINOR. No. We will proceed. But, for example, at the Museum of Natural History what we have had to do is inventory in batches. We will not go down to each individual specimen as finely as we would like to do.

Mr. YATES. You are not talking about identifying each of the bugs?

Mr. CHALLINOR. No. For example, we will have a whole cabinet full of squirrels from a certain part of the world. Rather than isolating them drawer by drawer, we will just say this drawer has x number of squirrels in it. And we will have to inventory it in that fashion rather than breaking it down as we will ultimately have to do.

Mr. YATES. How much of the cutback is for critical items, which you would categorize as critical?

Mr. CHALLINOR. That is a judgment question. I would say between half and two-thirds we would consider quite critical.

Mr. YATES. Will you have to provide that money at sometime?

Mr. CHALLINOR. I believe we will, yes.

Mr. MURTHA. What about the cuts in the Air and Space Museum?

Mr. CHALLINOR. For example, we are unable to replace worn items such as carpeting and have curtailed maintenance and repairs at the Garber facility.

Mr. YATES. Will any of the cuts affect the enjoyment of the public of your facilities?

Mr. CHALLINOR. We do not anticipate that the public will notice these kinds of cuts appreciably, Mr. Chairman.

Mr. YATES. It is primarily in your research?

Mr. CHALLINOR. Primarily in research, and some maintenance.

Mr. YATES. Does that take you through all your cuts from OMB?

Mr. CHALLINOR. As far as signs is concerned, yes.

Mr. YATES. OMB cut you back from \$155 million to \$147 million, to \$144 million, and you are before this committee with a request for \$144 million for your various departments. Then they cut you back on the foreign currency program by \$2.5 million, construction by approximately, \$2.2 million. Restoration and renovation of buildings by about \$3.5 million. That is a big cut. Construction of the quad, they didn't cut you back at all.

HISTORY AND ART REDUCTION

Well, that takes care of science. What about history and art, Mr. Blitzer? You weren't cut back very much at all. You were cut back by \$300,000—no, you were cut back by a million dollars.

Mr. BLITZER. The figure I have is \$506,000.

Mr. YATES. You started out with \$23,298,000. Then you went back and asked OMB, at its suggestion, for \$22,173,000. That is \$1.1 million that is cut at that point. Then OMB cut you back another \$150,000. Okay. Now you say how much survived?

Mr. BLITZER. Not counting necessary pay and inflation, program increases of \$25,000 survived.

Mr. YATES. What was represented by the \$1.2 million that was cut out by OMB?

Mr. BLITZER. I'm sorry for this confusion. An amount of \$506,000 in program increases were cut out by OMB. They are spread over all of the bureaus and they consist of various kinds of expenditures.

Mr. YATES. You start out with \$23,298,000.

Mr. YELLIN. Mr. Blitzer has the correct figures. It is a technicality about where our base started for 1982.

Mr. YATES. Where did it start?

Mr. YELLIN. It started with the March budget request, President Reagan's initial request of \$135.1 million. This amount was subsequently reduced in September by approximately \$8 million in President Reagan's second revised request.

Mr. YATES. So you come up with \$147 million as being the correct figure?

Mr. YELLIN. Yes. Mr. Blitzer's program at this point was \$22,173,000.

Mr. RIPLEY. That represents a cumulative history of about the last 2 years in maintaining very close to status quo.

Mr. YATES. What did you lose that is hurtful in the \$150,000, anything?

Mr. BLITZER. It has been a kind of cumulative problem: the 4 percent cut in this year's budget and then the problem I guess still not resolved of the pay supplemental for this year. So the bureaus have to cut back in various ways.

Mr. YATES. Put that in the record then.

[The information follows:]

OMB reductions to History and Art for fiscal year 1983

National Museum of American History supplies and materials for:		Thousand
Coin and stamp management		\$54
Contractual conservation services.....		70
Replacement of OPlantS Support		60
Subtotal		184
National Museum of American Art replacement of OPlantS support		¹ 80
National Portrait Gallery replacement of OPlantS support		¹ 50
Hirshhorn Museum and Sculpture Garden replacement of OPlantS support...		¹ 75
Archives of American Art compactable storage equipment and supplies		117
Total.....		² 506

¹Resources for exhibition support formerly provided to the museums by the Office of Plant Services that have been reapplied for OPlantS' primary function of building maintenance.

²The items represented in this total were specifically not allowed by OMB. Because of adjustments by OMB following the original request, such as those for the funding of Congressionally restored positions and the equalizing of the OMB and Congressional bases following the 12 percent revised OMB fiscal year 1982 budget, the final difference in the History and Art activity totaled \$154,000.

Mr. YATES. Does this mean you could not put on as many shows as you proposed?

Mr. BLITZER. It is across the board. In some cases we have to cut acquisition funds, exhibition funds, and equipment funds.

PUBLIC SERVICE REDUCTION

Mr. YATES. Public service. We can forget the first column then. Public service started with \$2,810,000 and wound up with \$2,805,000. Public service wasn't hurt very much.

MUSEUM PROGRAMS REDUCTION

Museum programs were cut by about \$600,000.

Mr. PERROT. The major loss was from the Smithsonian Institution Libraries. The amount designated for the automation of the library system was removed from the budget.

Mr. YATES. What is the automation feature?

Mr. PERROT. That means having library catalogs placed on computers and developing a data base to permit the libraries to operate with fewer personnel but with more efficiency than they do now.

Mr. YATES. How much money is involved?

Mr. PERROT. \$533,000.

Mr. YATES. That is the major cutback?

Mr. PERROT. Yes.

Mr. YATES. OMB has you going and coming then? They won't give you this data processing machine and won't give you the personnel, either?

Mr. PERROT. Mr. Chairman, these are difficult times.

Mr. YATES. What libraries are we talking about here? Are we talking about all the museum libraries?

Mr. PERROT. The central library of the Institution services the branch libraries which are located in all our museums as well as in several research departments.

If I might say, Mr. Chairman, the trend in libraries is to automate up to national or international standards to permit libraries around the country to communicate with one another.

We will be delayed in achieving this goal.

SPECIAL PROGRAMS REDUCTION

Mr. YATES. Special programs were cutback by \$478,000. What are the special programs?

Mr. YELLIN. The major cut here was in the Support Center.

Mr. YATES. What do you mean by special programs? What does that include?

Mr. YELLIN. It includes a section of our budget, Mr. Chairman, which consists of six line items including American studies and folklife program, international environmental science program, academic and educational programs, a collections management inventory program, a major exhibition program and Museum Support Center equipment and operations.

Mr. YATES. The bulk of the cut was personnel from the Support Center?

Mr. YELLIN. That is right.

Mr. YATES. How much?

Mr. YELLIN. Throughout all of the programs, \$1.7 million was cut.

Mr. YATES. How much is represented by the personnel?

Mr. YELLIN. \$1.7 million.

ADMINISTRATION REDUCTION

Mr. YATES. Administration. You were cut by a little less than \$200,000. Is that personnel, too?

Mr. JAMESON. There are two areas there, Mr. Chairman. One was the computer time requirement for the Accounting Office, about \$100,000, and the balance of \$77,000 is represented by a request to OMB to replace some ancient graphics and other data processing equipment.

Mr. YATES. What do you mean by graphics?

Mr. JAMESON. Graphic plotters, linked mostly for scientific research support. The computer has the ability of being linked with proper display devices to produce maps, and two and three-dimensional displays of computer data which is quite helpful to the scientists.

Mr. YATES. OMB struck that out?

Mr. JAMESON. There was a general category called automation in the presentation to OMB. This was a component of that which was not allowed in the OMB allowance.

FACILITIES SERVICES REDUCTION

Mr. YATES. Working facilities services. You lost a significant amount there, \$1.4 million.

Mr. PEYTON. The roofs are significantly improved over last year, Mr. Chairman. As a matter of fact, I have a report as of this morning.

CONDITION OF FREER ROOF

Mr. YATES. How is your roof Mr. Lawton?

Mr. LAWTON. We had a small leak over the weekend.

Mr. YATES. How do you account for the fact it leaked over the weekend and didn't leak yesterday?

Mr. PEYTON. We have been working with our roof maintenance crew and gradually eliminating perhaps six or seven places where very minor amounts of water have been entering the building. We have found and corrected all but one as of the end of last week.

Mr. YATES. How bad a leak did you have, Mr. Lawton?

Mr. LAWTON. It wasn't a very bad leak.

Mr. YATES. Is this an impossible dream?

Mr. PEYTON. No, sir. As a matter of fact, the case Dr. Lawton is referring to followed our most recent repairs, when we flooded the roof to test it—this seems to be the most sure test and is actually even better than a typical rain. When the plug was removed so the water could go down the drain, we found that a floor drain in the attic is connected to the stormwater drain. The water backed up in this floor drain, overflowed, and went down into the space below.

That is actually a code violation; the building was built in 1925 and we didn't discover it until we ran this test. In fact, the water was not from a roof leak, per se, but a cross-connection between the sanitary sewer and the storm sewer.

Mr. YATES. I assume that is taken care of?

Mr. PEYTON. Yes, sir, it has been corrected and the ceiling will be painted.

SECURITY EQUIPMENT

Mr. YATES. You haven't told me how you got hurt with the \$1.4 million loss.

Mr. PEYTON. We had previously identified a fairly significant requirement to upgrade our security equipment throughout the Institution. By equipment I am talking primarily about the small devices that are attached to paintings or exhibit cases and the necessary alarms that relate to those.

We have developed a multiyear program to request the replacement and correction of some outdated and obsolete and perhaps not as thoroughly installed security equipment dating back a number of years. We had originally requested for fiscal year 1983, \$2,662,000, and we have in our current request \$1,702,000 for a shortfall of \$960,000, which was requested for 48 additional guards and security personnel.

Mr. YATES. How critical are they?

Mr. PEYTON. They are very important. We have a shortfall of some 117 guards and security personnel which we are attempting to correct on a phased basis. Because of the shortfall we've had to close galleries on a selective basis and in fact to curtail our summer hours schedule. At this time, we plan to request additional security personnel in addition to a follow-up security equipment increment for fiscal year 1984.

SPECIAL FOREIGN CURRENCY PROGRAM REDUCTION

Mr. YATES. That takes care of facilities services, then foreign currency program. Are you hurt, Mr. Ripley, by a cutback of \$2.5 million?

Mr. RIPLEY. We have been cutback \$2.5 million, as you know, and we are concerned about that. We had hoped, of course, to be able to develop the American Institute of Indian Studies program which we have talked about in the previous meetings, but I don't think that would be possible.

We have \$1,700,000 available for 1-year funding of continuing projects and \$300,000 to support new projects. I think that both Dr. Challinor and Mr. Blitzer join with me in feeling that it is too bad to be cut down so much, because we have an obligation for forward-funded reserves for the American Institute of Indian Studies and the United States contribution to Pakistan which were in our original estimate for archeology and related disciplines.

We had estimates for transfers to the State Department for foreign affairs administration support which is very much reduced and estimates for the science information program for translations which have been cut out.

RESTORATION AND RENOVATION OF BUILDINGS REDUCTION

Mr. YATES. Mr. Peyton, I have asked you about the very significant cutback in restoration and renovation of buildings. Are you the one to tell us about that?

Mr. PEYTON. Yes, sir.

Mr. YATES. Does that hurt you? Does that put you on a program of longer deferred maintenance?

Mr. PEYTON. As talked about before in previous appearances before the subcommittee, we have identified about \$60 million worth of R&R types of projects that need to be done over time. The way we organize this on a year-to-year basis is on the basis of priorities. In making this cut it was just a matter of going down a list and drawing a line at the level of money that was deemed to be the appropriate amount to fit into this program.

The work that will not make it in 1983 most assuredly would be a leading candidate for 1984. There are some practical limits once

again on how much we can accomplish in a given year. We have had a carryover going into the current fiscal year—that is 1982—of about \$6-plus million. So that together with the appropriation for 1982 gave us an immediate availability of about \$12 million.

We are moving along well in obligating those funds, but we will probably end up at the end of the fiscal year with a carryover of about \$2 million. To significantly increase the amount of money requested for 1983 with the present staff that we have would mean simply that the money wouldn't get obligated in the fiscal year for which it is appropriated.

Based on the priority listing, we do the most important and critical things first.

Mr. YATES. Why don't you put a memorandum in the record as to what should be done now and what you believe you can push forward?

[The information follows:]

FISCAL YEAR 1983 RESTORATION AND RENOVATION OF BUILDINGS

The following table details by category the Institution's original fiscal year 1983 restoration and renovation request to OMB and the fiscal year 1983 request to the Congress. The differences between the two requests constitute the OMB reductions. The items cut by OMB can be deferred until fiscal year 1984.

[In thousands of dollars]

Category	Fiscal year 1983 request—	
	To OMB	To Congress
General repairs.....	\$710	\$300
Facade, roof, terrace.....	4,415	3,300
Fire detection and suppression.....	1,196	1,205
Access, safety, security.....	990	665
Utility improvements.....	2,975	2,380
Other projects.....	1,585	600
Totals.....	11,871	8,450

Detail by project and by building has been provided to the committee for their files.

ZOO CONSTRUCTION REDUCTION

Mr. YATES. I overlooked Mr. Reed. Mr. Reed, you lost \$2.2 million in construction.

Mr. REED. The loss in the budget cuts was from the \$150,000 we asked for in the contractual services which would, as we mentioned in last year's hearing, would make up for the cut in personnel. Lawn mowing, janitorial, maintenance of the air conditioners and so on, this type of thing.

We lost \$60,000 in supplies and equipment for that.

Mr. YATES. Are you talking about zoo construction and improvements?

Mr. REED. No, please, excuse me.

Mr. YATES. According to the chart we have, you asked OMB for \$3,720,000 and you received \$1,550,000.

What did you lose? You were going to build something with \$2.2 million.

Mr. REED. That was for the veterinary hospital, a quarantine facility and a primate facility at Front Royal, Virginia. They have been deferred.

Mr. YATES. Has OMB said to defer it another year?

Mr. REED. Right, sir. And \$50,000 for the master graphics program here at the Zoo.

MASTER GRAPHICS PROGRAM

Mr. YATES. What is a master graphics program?

Mr. REED. This is all of the labels, signage, directions throughout the Zoo which has been on a phased program.

We had it originally on a 3-year phased program. We are still on the 3-year program—

Mr. YATES. On the 3-year phased program?

Mr. REED. Several years later; yes.

And the \$80,000 for design of the Small Mammal Building at Front Royal, Virginia. This the second phase of that building.

Mr. YATES. Can you delay that? What happens if you delay it?

ZOO'S BREEDING PROGRAM

Mr. REED. Our planned programs of scientific research and breeding will be delayed. We will do the best that we can.

Mr. YATES. What will that do to the happiness of the animals if you delay their breeding?

Mr. REED. The animals we would be using in that facility will not be present—we would not acquire the animals if we don't have a house for them.

Mr. YATES. All right.

Would that be for the pandas?

Mr. REED. No, the pandas are doing quite well, sir.

Mr. YATES. What is the offspring prospect?

Mr. REED. This year we did artificial insemination and at the same time we did the artificial insemination we did a laparoscopic examination of the female, Ling-Ling. We know that her ovaries were ready and that she released three, possibly six ova. We did inseminate twice within a 12-hour bracket of the ova release. There were 7 cc's of semen put into her, that is about 7 million sperm at least, so we think we have a—

Mr. YATES. You got a match?

Mr. REED. I don't want to commit myself, but we are a 100 percent better than we have ever been before.

Mr. YATES. Let's come back at 1:30 then—or are you completed with your answer?

Mr. REED. The answer will probably come later this fall.

Mr. YATES. We will just have to wait breathlessly for the result.

AFTERNOON SESSION

Mr. MURTHA [presiding]. The hearing will come to order.

WORKERS' COMPENSATION

The justification at page A-5 indicates that the employee compensation bill payable by the Smithsonian to the Department of Labor is \$568,000. For the record, would you provide the detail of the claims against the Smithsonian.

[The information follows:]

DETAIL OF CLAIMS

The budget request of \$568,000 for Workers' Compensation is based on claims incurred from July 1, 1980 through June 30, 1981. The Institution is in the process of examining the bill submitted by the Department of Labor's Employment Standard Administration for that period.

The Smithsonian continues to pursue its Accident Safety Program administered by the Office of Protection Services which includes employee training in safe working environments and supports a safety staff whose duties include performing comprehensive safety surveys and identifying and eliminating potential accident hazards. A measure of the success of this Program can be seen in the fact that the number of substantial claims has declined over the past year. The table below details by category claims against the Institution from July 1980 through June 1981.

[Dollars in thousands]

SI, not otherwise classified (account 1359):

Number of cases	130
Medical payments	\$100
Non-fatal compensation payments.....	225
Fatal compensation payments	45
Total payments	370

National Zoological Park (account 1351):

Number of cases	58
Medical payments	\$22
Non-fatal compensation payments.....	176
Total compensation payments	0
Total payments	198
Total	568

RADIO GEOASTRONOMY PROGRAM

Mr. MURTHA. Page A-23, the radio geoastronomy program is discussed. One of the activities described there is related to the atomic clock development. What is the relationship of this program to that of the National Bureau of Standards?

Mr. RIPLEY. I think that Dr. Challinor can answer that if you allow him.

Mr. CHALLINOR. The hydrogen maser clock, which has been developed at the Smithsonian Laboratory is used specifically for scientific purposes, namely to see how gravity affects the ticking of a clock or how fast a clock gains or loses the less gravity to which it is subject.

By launching clocks out into space that are extraordinarily accurate, that is, plus or minus one second in 50 million years, we can determine how gravity affects time, namely, these clocks that we launch into space are synchronized with clocks on earth.

As a result of these experiments, we have been able to develop the proof of Einstein's hypothesis known as the equivalence principle, which he postulated in the early 1900's.

We now have the hardware.

Mr. MURTHA. How do you measure something like that, whether it is off or not?

Mr. CHALLINOR. This is difficult to do. You measure it with a computer. It has to do with the behavior of the hydrogen atom. What you want is something that ticks very, very regularly and by putting these clocks at very low temperatures and synchronizing them for 2 or 3 years, we can be assured that they are ticking together.

One of these clocks was then launched into space. It radioed back how fast it was ticking and we compared that rate with the ticking of the two clocks back on earth.

Mr. RIPLEY. And that is not being done by the National Bureau of Standards.

Mr. CHALLINOR. They are more concerned with clocks having to do with navigation. They do not need an accuracy this great.

I have to put the word "clock" in quotes. It does not have a face and it doesn't tell time. Clock in this term is something that ticks accurately.

[Additional information follows:]

At SAO the development of atomic clocks is a state-of-the-art activity. Our main purpose is to develop instruments of extreme stability which are sensitive enough to be used to make measurements which will ultimately confirm predicted physical theories.

At the National Bureau of Standards their prime function is to develop and maintain a standard of frequency as an accurate representation of the legal definition of frequency.

There is no formal relationship between SAO and NBS. However, informal exchange of scientific information does occur.

Mr. MURTHA. What is the level of funding provided by this program in the atomic clock development?

Mr. CHALLINOR. I would have to furnish that for the record. It is part of the budget of the Astrophysical Laboratory.

[The information follows:]

GEOASTRONOMY DIVISION BUDGET

Atomic clock development falls into two areas. They are basic research and development of the instruments, and the construction of atomic clocks for scientific applications, for example, in Very Long Baseline Interferometry and the Deep Space Network. The latter work is supported primarily by grants and contracts which in fiscal year 1982 is expected to amount to \$992,000 including overhead. Salaries and Expenses support for this program amount to approximately \$65,000.

IMAGE RECONSTRUCTION

Mr. MURTHA. Page A-25, another activity is discussed, that of image reconstruction by computer. Is this the same technology that was used by the jet propulsion laboratory with the Saturn fly-by mission?

Mr. CHALLINOR. It is basically the same technology, yes, Mr. Chairman.

Mr. MURTHA. What role did the Smithsonian play in development of that technology?

Mr. CHALLINOR. The technology of image reconstruction has broad applications. The hardware including array processors and display terminals were first developed for medical purposes. The software which are the actual computer programs which decipher the bit of information and construct the images are written for specific applications. The Saturn fly-by software is specifically written to reconstruct the optical information taken by the Voyager spacecraft. At SAO when we refer to VLBI image reconstruction we are referring to deciphering information taken by radio telescopes. The software was developed elsewhere for the radio astronomy facilities and has been adapted to our computers.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE LIBRARY CONSTRUCTION

Mr. MURTHA. The Smithsonian Tropical Research Institute is discussed beginning at page A-28. Has the British-Argentine dispute had any relationship on that and Panama to date?

Mr. CHALLINOR. Not that we are aware of, Mr. Chairman.

Mr. MURTHA. What is the status of the library reconstruction for which funds were approved in a reprogramming?

Mr. CHALLINOR. Construction was delayed because the contractor defaulted on his contract bond. The bond has now been picked up by the bonding agent and work has now started on that library.

PAUL GARBER FACILITY

Mr. MURTHA. Paul Garber Facility at Suitland, Maryland, is an adjunct of the Air and Space Museum. How frequently are tours provided at that facility?

Mr. CHALLINOR. They vary, Mr. Chairman, usually two to three times a week, particularly during the winter. We have had as many as 9,000 people out there a month. It is very, very popular.

Most of the publicity has been by word of mouth airplane buffs interested in restoration of antique airplanes.

Mr. MURTHA. How does the general public go about arranging a tour?

Mr. CHALLINOR. They simply call the National Museum of Air and Space.

Mr. MURTHA. Is there any particular size group or an individual or how do you work it out?

Mr. CHALLINOR. Normally we prefer small groups, but we have occasional open house days when a visitor can simply turn up.

Mr. MURTHA. What is the visitation annually as a result of those tours?

Mr. CHALLINOR. Oh, we are talking about 15,000 visitors so far, but we expect this number to increase yearly.

FRANKLIN DELANO ROOSEVELT CENTENNIAL

Mr. MURTHA. The Smithsonian was provided in the 1981 supplemental with \$200,000 to coordinate the exhibitions related to the 100th anniversary of the birth of Franklin Delano Roosevelt. What has been the general response to that series of exhibitions?

Mr. RIPLEY. Mr. Chairman, I would like to ask Mr. Blitzer to speak to this question. He oversees the art and history museums that were responsible for those splendid exhibitions.

Mr. BLITZER. The response has been very enthusiastic, Mr. Chairman. We are grateful to the committee for calling the centennial to our attention and for providing us the funding.

I might add that we were able, by raising private funds and contributing some of our appropriated funds to add about \$80,000 to the \$200,000 that this committee gave us for that purpose.

I can give you a breakdown of the funding for each activity listed in the brochure there.

Mr. MURTHA. Why don't you do that for the record.

[The information follows:]

FDR centennial observance

	<i>Thousands</i>
National Museum of American History: "Franklin Delano Roosevelt: The Intimate Presidency"	\$124
National Museum of American Art: "Roosevelt's America: New Deal Paintings for the NMAA"	7
National Portrait Gallery: "FDR: The Early Years"	4
Office of Folklife Programs: "Folk Music in the Roosevelt White House"	33
Anacostia Neighborhood Museum: "Mary McLeod Bethune and Roosevelt's Black Cabinet"	5
Smithsonian Institution Traveling Exhibition Service: "Franklin Delano Roosevelt: The Intimate Presidency"	4
Hirshhorn Museum and Sculpture Garden: "Five Distinguished Alumni: The WPA Federal Arts Project"	2
Other: Brochures, photography, TV announcements and incidentals	21
Total fiscal year 1981-82 appropriation	\$200

Mr. MURTHA. When will the SITES exhibit be prepared to go on the tour associated with the exhibits?

Mr. BLITZER. The Franklin Roosevelt exhibit? Mr. Kennedy, the Director.

Mr. KENNEDY. As soon as the show goes down at the end of the summer, it will be recombined in a portable edition and go on the road.

Mr. MURTHA. Will you stop at any small towns or just the big cities?

Mr. KENNEDY. If Peggy Loar is here, she could tell us.

Mr. RIPLEY. Mrs. Loar is head of our Traveling Exhibition Service.

Ms. LOAR. We have a small history museum and, of course, it will be available for a number of years, we hope, in more than one copy. So yes, we expect a large audience.

Mr. MURTHA. How would a small town go about getting on the list of the tour?

Ms. LOAR. Generally most museums and community centers in all towns across America are on our mailing list. So through a normal press mailing of our Update and Site-line newsletter, they will know.

Mr. MURTHA. How many requests do you have so far?

Ms. LOAR. Requests for this particular exhibition? We don't have any requests for this one, because it has not yet been offered.

Mr. MURTHA. You have not announced it yet?

Ms. LOAR. That's correct.

GEORGE AND MARTHA WASHINGTON PORTRAITS

Mr. MURTHA. The program for the National Portrait Gallery is discussed beginning at page A-65. What is the status of fundraising for the shared acquisition of the George and Martha Washington portraits?

Mr. BLITZER. Mr. Chairman, we had originally hoped we might raise outside funds for purchase of those portraits. The total price was in the neighborhood of \$5.5 million.

As you may recall, when we were in the midst of doing that, the Mayor of Boston made a kind of public political issue out of all of this. The result was that first, we agreed with the city of Boston to stop all our efforts for about 6 months while they saw if they could raise the money.

They were unable to raise the money. They came to us with a proposal that we purchase half of the portraits, a 50 percent share of them, and the Museum of Fine Arts in Boston the other 50 percent and we share them for equal time.

We did that and I regret to say that all of those intervening events poisoned the atmosphere so much that it seemed really impossible for us, it was really impossible to find private donors.

I cannot promise we would have been able to do it otherwise, but at that point, to ask someone to provide half the share that raised this much fuss in the press was just not possible.

The Regents authorized the expenditure of half the amount of the purchase price.

Mr. MURTHA. So what are we going to do? What is the status?

Mr. BLITZER. We now own them.

Mr. RIPLEY. We have paid for our half out of Regents' Trust-funded acquisitions program.

Mr. MURTHA. Has Boston paid their share?

Mr. RIPLEY. Yes, they have raised the money.

Mr. MURTHA. You are in the process of sharing them, it is just paid for with different funds.

Mr. RIPLEY. They are owned now jointly.

Mr. BLITZER. They are now here. They have been here for about 2 years, I believe, and will be for another year. They move on a 3-year cycle.

SILVER NITRATE FILM CONVERSION AT THE COOPER-HEWITT MUSEUM

Mr. MURTHA. A program increase of \$25,000 requested for the Cooper-Hewitt Museum, page 81. This increase will be used as part of an overall increase of \$152,000 for preservation of the silver nitrate film.

Where is the Cooper-Hewitt film now stored?

Mr. JAMESON. Mr. Chairman, it is in the museum in New York City.

Mr. MURTHA. What is this film?

Mr. BLITZER. If I could say a word, Cooper-Hewitt is a museum of the decorative arts. One of the great resources of the museum is an extraordinary archive of illustrations, of decorative arts, and motifs, and these photographs or negatives represent a small part of that.

As you know in the case of this sort of film, there is another kind of clock ticking. They deteriorate and become explosive if they are not converted.

Mr. MURTHA. So that is the danger, the danger is the possibility of disintegration or even an explosion?

Mr. BLITZER. I believe they become nitroglycerin or something of that sort. It is not simply a matter of losing them which you do, also, but that they are a hazard to their surroundings.

Mr. RIPLEY. They can burst into flames. In other words, they become hot enough, generated by the deterioration of the nitrate, to cause a fire. In the process, the film becomes gelatinous and all molded together like some jelly.

Mr. MURTHA. Are we all right now?

Mr. RIPLEY. We were working at it and it is a critical problem for many organizations that have such film archives around the world, in fact. We are in close touch with different anthropological and artistic collections that happen to be within this period when such film was produced.

And now it has been discovered that it was harmful in the long run, of course. But it is a worldwide problem.

MUSEUM OF AFRICAN ART VISITATION

Mr. MURTHA. The National Museum of African Art is discussed beginning at page A-85. Has visitation at this museum increased since it became part of the Smithsonian?

Mr. BLITZER. Slightly, yes, sir. The last full year, in 1981, visitation was 82,500, which is 2 percent over the previous year.

ANACOSTIA NEIGHBORHOOD MUSEUM VISITATION

Mr. MURTHA. Has the visitation to the Anacostia Neighborhood Museum declined since the Museum of African Art came into the Smithsonian?

Mr. EUELL. No, sir.

Mr. RIPLEY. Mr. Euell is the Assistant Secretary for Public Service. We are not aware of any change. The Director of the Anacostia Neighborhood Museum is here. Can you substantiate that, John?

Mr. KINARD. That's right, there is no change.

STATUS OF THE INTERNATIONAL EXCHANGE SERVICE

Mr. MURTHA. The budget for the International Exchange Service is discussed at page 95 and 96.

The distribution program has been sharply curtailed because pending legislation to transfer jurisdiction for the program from the Smithsonian to the Government Printing Office or some other organization has not been enacted.

What is the present status of this program?

Mr. RIPLEY. Mr. Hughes can answer that.

Mr. HUGHES. Mr. Chairman, we have been working with the Government Printing Office and the Library of Congress to develop a financing arrangement that is satisfactory to all concerned.

We, at the moment, are not even a fiscal agent. We are simply a passthrough for the funding. We have been working with the Li-

brary and the Printing Office to work out some other arrangement whereby somebody who has a substantive interest in the program, like the Library or possibly the GPO, which is the distributive agent, would pick up the financing.

They have explored a variety of alternatives, none of which have been fully worked out yet, but we are quite confident that an ultimate solution will be arrived at.

As far as we at the Smithsonian are concerned, I have written the public printer and the librarian that we do not intend to ask for funds for this program for fiscal year 1984.

We have asked in 1983 and we would, of course, make whatever funds the Congress provides available, but we don't intend to ask for them in 1984.

STATUS OF LEGISLATION

Mr. MURTHA. What is the status of the legislation that would transfer the jurisdiction from the Smithsonian?

Mr. HUGHES. I believe it is hung up in committee. There are some problems on the part of the Appropriations Committee with taking an action which would increase the size of the Legislative Branch budget.

SILVER NITRATE FILM CONVERSION

Mr. MURTHA. For the Smithsonian archives program, you have an increase of \$27,000 requested for the preservation of archives' nitrate negatives. Where are these films stored?

Mr. JAMESON. Mr. Chairman, we have arranged with the Library of Congress for a temporary, secure storage facility at Suitland. These negatives result from field expeditions primarily in the early 20th century. We believe that with this appropriation through a combination of contracting for reproduction of the nitrate film and some in-house services, we can correct the problem. There will be some nitrate films because of their historical value that once converted for research and day-to-day archival use, the original negatives will be stored in proper environmental conditions.

Mr. MURTHA. What type of historical films do you preserve?

Mr. JAMESON. Throughout Smithsonian history, we have documented, either in still photography or in motion picture photography, the results of field expeditions throughout the world. We also have been the recipient of 19th century and 20th century gift collections of films made by others.

Film holdings are extensive in the anthropological area. There is much film in the Museum of American History, that documents our 19th and 20th century transportation. There are also large holdings in the National Air and Space Museum.

Mr. MURTHA. I assume you have the same danger here of not converting as you did in the Cooper-Hewitt case.

STATUS OF LEGISLATION OF THE NATIONAL MUSEUM ACT

The request of \$782,000 is made for the National Museum Act account. This program is not authorized for fiscal year 1983. What is the status of the legislation for fiscal year 1983?

Mr. HUGHES. Mr. Perrot can comment.

Mr. PERROT. Mr. Chairman, legislation was introduced by the Board of Regents, both to the House and Senate. The bill has been reported out by the Senate committee and we are expecting action in the coming weeks in the House.

FOLKLIFE FESTIVAL

Mr. MURTHA. The American Folklife Festival is discussed beginning at pages 130 through 133.

When will the Folklife Festival be held this year?

Mr. BLITZER. Sir, it is back where it began, about the 4th of July, specifically from June 24 through June 28 and the 1st to the 5th of July.

Mr. MURTHA. The budget at page 130 shows that the Federal fund portion is \$584,000 and the unrestricted general Trust fund is \$505,000 for a total of \$1,089,000. In addition, \$110,000 is shown for Federal grants.

Does this include the cost to the Park Service of providing support for the Folklife Festival?

Mr. BLITZER. No, sir.

Mr. MURTHA. What are the principal sources for the unrestricted Trust fund for this program?

Mr. BLITZER. The funds that are shown on the table as unrestricted are an allocation made by the Smithsonian from its own Trust fund budget. In addition to that, however, not shown here because the figures were not available, the Folklife program has raised very considerable outside, nonappropriated funds.

Mr. MURTHA. Provide that for the record if you would.

[The information follows:]

FISCAL YEAR 1982 FOLKLIFE FESTIVAL—SOURCES OF OUTSIDE FUNDING

[In thousands of dollars]

	Grant to Smithsonian Institution	In-kind contribution
Oklahoma Diamond Jubilee Commission	\$291	\$59
International Cultural Society of Korea	34	65
The Musicians Performance Trust Fund		20
Total	\$325	\$144

COLLECTIONS MANAGEMENT INVENTORY REQUEST

Mr. MURTHA. The justification at page 147 shows in summary fashion the funding availability for the collections management inventory program. The minutes of the May 3 Regents meeting at page 46 show the percentage of accomplishment range of 61 at the National Museum of American History to 100 percent for the Freer Portrait Gallery, the zoo and the Hirshhorn. When is this program expected to be completed?

Mr. HUGHES. I could respond to that, Mr. Chairman.

Our completion date, is June 1983. We expect to finish a base inventory at that point. The base inventory is essentially a comprehensive listing of all of the items in the Smithsonian.

There are some decisions that have been made as to which items should be dealt with in groups, but by June of 1983, we will have inventoried individually all items of significant intrinsic or scientific value and will have group or batch inventories of all other items in our collection, which will total something like 70 or 80 million items.

Mr. MURTHA. What comes after the inventory?

Mr. HUGHES. The next step essentially will be a reconciliation of that baseline inventory with accession and deaccession records of the Institution built up over the years.

The line between inventorying and regular curatorial work is difficult to draw. The scientists within the Institution are anxious to make the inventory as detailed as possible because the more detailed it is, the more useful it is for scientific research and to identify for staff scientists or visiting scientists what we have.

We have had to draw some arbitrary lines around the inventory to get it done. As part of the ongoing effort, we will want to add to the amount of detail in the computer records so that we can pull out of our collection the things that are valuable for scientific research and so that we can then tell researchers, in effect, what we have and make the collections more useful.

MAJOR EXHIBITION PROGRAM REQUEST

Mr. MURTHA. \$840,000 is requested for the major exhibition program. For the record, how will these funds be used in fiscal year 1983 by program and exhibition.

[The information follows:]

MAJOR EXHIBITION PROGRAM

The \$840,000 requested for this program in fiscal year 1983 would be used by the following Smithsonian organizational units for the following exhibitions:

[In thousands of dollars]

Unit	Exhibition	Amount
National Museum of Natural History.....	Holy Land.....	\$60
Smithsonian Institution Traveling Exhibition Service.....	Holy Land.....	15
Folklife program.....	Celebration.....	100
National Museum of American History.....	Life in America.....	450
National Museum of American History.....	Various ¹	215
Total.....		840

¹ Includes \$65,000 for dismantling existing installations for subsequent development, \$75,000 to improve visitor orientation displays in the Museum's grand concourses, and \$75,000 to begin work on an exhibition of the history of industrialization in America.

Mr. MURTHA. How do they relate to the normal exhibition activities of the museums involved?

Mr. BLITZER. May I, Mr. Chairman, speak to that? These are over and above the funds in the base of any one museum. This is why the program was developed in the first place.

For ones that have been done this year I have some catalogues here, which I would like to show you later, if you like. One of the

exhibitions funded for which we ask a final small appropriation in the coming year is the Celebration exhibition. It was done jointly by the Folklife Office and the National Museum of American Art. It fills the Renwick Gallery. It would have been impossible within the base of either or both units together, consisting of objects throughout the Smithsonian, to handle that.

As I say, as this program has developed—this is the third year for which we request funds—it is becoming clear to us that there is a major continuing need in the Museum of American History and when we make each year a plan to spend these funds a year or two down the road, we have realized that the needs of the Museum of American History come high on our list of priorities.

I am not sure whether I should say this on this occasion, but we are considering whether it would be possible and proper for us to take some of the funds that we have been justifying under the major exhibition program and simply try to get them plugged into the base appropriation of the Museum of American History. It would simplify the situation. I must say we hope even if that is done, that there will be as it were, a mobile reserve that would be available for special opportunities and occasions. One that is coming up, for example, in 1985, is the 10th anniversary of the Hirshhorn Museum. Clearly it seems to make no sense to put several hundred thousand dollars in the base of that museum, but in that year we hope the funds would be available for that occasion.

MUSEUM SUPPORT CENTER REQUEST

Mr. MURTHA. \$6,707,000 is requested for Museum Support Center equipment and operations. This is an increase of \$2,205,000 over the 1982 base.

For the record, will you provide a table showing at a useful level of detail how funds have been provided to date, how these funds in 1983 will be used, and the total cost of the equipment and the facility.

[The information follows:]

MUSEUM SUPPORT CENTER EQUIPMENT AND OPERATIONS

The following estimates are based on the "Five-Year Prospectus, fiscal year 1983-fiscal year 1987"; the Institution currently is reexamining these estimates in preparation for the "Five-Year Prospectus, fiscal year 1984-fiscal year 1988."

A. COLLECTIONS STORAGE EQUIPMENT

[In thousands of dollars]

	Fiscal year—					
	1981	1982	1983	1984	1985	1986
National Museum of Natural History.....	¹ \$2,051	\$2,767	\$2,507	\$1,985	\$1,200	\$1,300
National Museum of American History.....		458	650			
Total.....	2,051	3,225	² 3,157	1,985	1,200	1,300
Cumulative total.....	2,051	5,276	8,433	10,418	11,618	12,918

¹ Amount includes \$400,000 base appropriations for NMNH through fiscal year 1985 and \$200,000 thereafter.

² An amount of about \$785,000 is planned to be reallocated, in conjunction with \$250,000 from moving expenses, to cover the cost of staffing the center in fiscal year 1983. An equivalent amount then will be added in a future year.

Funds appropriated in fiscal year 1981 and fiscal year 1982 are being used to acquire a unique storage system consisting of self-supporting three-tiered steel racks holding storage compartments with drawers, shelves and other appropriate fixtures. The system can be installed incrementally in unitized floor-to-ceiling sections which eliminates the hazard of installing upper level storage components over collections stored below, but still allows purchase and installation in a phased manner over a number of years according to occupancy schedule. If the above schedule can be maintained, the Institution plans to spend \$1.3 million per year through 1989 for a cumulative total of approximately \$16.8 million. Bid invitations for "wet" storage were issued on May 5, 1982 and solicitation for bids for the modular storage system are expected to be issued in July, 1982. Based on the responses to the solicitation, the Institution will have a firmer basis for estimating the overall cost. If funds must be reprogrammed to meet operating needs, the schedule will have to be extended beyond 1989 and total expenditures will be increased due to inflation and higher unit costs for smaller orders.

B. LABORATORY EQUIPMENT AND FURNISHINGS

[In thousands of dollars]

	Fiscal year—			
	1981	1982	1983	1984
National Museum of Natural History.....		\$500	\$894	\$1,478
National Museum of American History.....		200	105	25
Smithsonian Institution Libraries.....		32	10	7
Office of Printing and Photographic Services.....		23	24	
Office of Protection Services.....	\$210	200		
Office of Horticulture.....			30	
Conservation Analytical Laboratory.....	450	135		
Total.....	660	1,090	1,063	1,510
Cumulative total.....	660	1,750	2,813	4,323

Included in this equipment are security hardware devices which will be compatible with the proprietary alarm system for the Office of Protection Services; photographic equipment for documentation of the collections for the Office of Printing and Photographic Services; shelving for the branch library at the MSC; grounds maintenance equipment for the Office of Horticulture; fume and exhaust hoods, large laboratory sinks, chain hoists, lab cabinets, analytical balances and other specialized scientific equipment for the National Museums of American History and Natural History and the Conservation Analytical Laboratory. The fiscal year 1984 request will complete the requirements for these types of equipment, assuming the current schedule can be maintained.

C. STAFFING AND OTHER OBJECTS EXPENSES

Fiscal year:	Thousands
1981: FTP 7	\$89
1982: FTP 8	181
1983: ¹ FTP 8	587
1984: FTP 123	2,919
1985: FTP 129	3,121
1986: FTP 131	3,246
1987: FTP 133	3,326

¹ An additional 66 positions and \$1 million are needed to staff the Center in fiscal year 1983. The Institution plans to use 66 vacant positions from throughout the Institution and cover the cost of these positions by reallocating amounts of \$785,000 from equipment funds and \$250,000 from moving expenses.

D. UTILITIES

Fiscal year:	Thousands
1983	\$800
1984	880
1985	970
1986	1,070
1987	1,180

E. MOVING EXPENSES

Fiscal year:	Thousands
1983	¹ \$1,100
1984	750
1985	750

¹ An amount of \$250,000 is planned to be reallocated, in conjunction with \$785,000 from storage equipment, to cover the cost of staffing the Center in fiscal year 1983.

SUPPORT CENTER STAFFING

Mr. MURTHA. The justification and the Secretary's statement indicate there is a possibility that staffing for this facility will have to be established through reprogramming of positions from other programs.

Why would this be necessary?

Mr. JAMESON. Mr. Chairman, while OMB did allow the \$2.2 million increase to the fiscal year 1982 base, for which we are appreciative, there is strong constraint over there in terms of providing additional money for staffing. As we discussed this morning, one of the items that did not survive the OMB review was \$1.7 million which was related to 114 or so positions that we estimate this new facility will require by fiscal 1984.

This center is proceeding very well on the construction front. It is going to be a very important new addition to the Smithsonian in terms of proper conservation, storage, and research on collections.

We have an obligation to open as soon as possible in fiscal year 1983. It is our present judgment that we can provide approximately 66 positions on a part-year basis by examining very carefully the 60 organizations in our salaries and expenses budget. The workyear ceiling which we are operating within has created vacancies.

We would do this with great care to be sure that by taking vacant positions, we would not create commensurate problems in those organizations.

We would assign those positions to the Museum Support Center in fiscal year 1983 to go with the monies that OMB has provided for this project. That is the \$6.7 million.

It would be our intention to review the situation in terms of formulating our 1984 budget.

If, indeed, this process has created problems, we would make sure that we emphasize this in the budget in September to OMB.

But we have a very strong obligation to put this exciting new facility to work and we are going to try hard to do it.

Mr. MURTHA. For the record, answer that in any additional way you wish. There were a couple questions which you have answered, but you may want to add some detail to that.

[The information follows:]

MUSEUM SUPPORT CENTER

The Support Center will be completed in January 1983 at which time the Smithsonian will have beneficial occupancy. After installation of the proprietary alarm system, it is expected that collections can begin to be transferred to the Center in about July 1983. It is essential to allocate management, protection, building systems maintenance, and custodial positions to the operation of the Center if this schedule is to be maintained. Use of a portion of the equipment funds, an amount of about \$785,000, would slow the acquisition of storage and work equipment, but is preferable to leaving the Center idle until fiscal year 1984 when there is no guarantee that additional positions would be provided to the Institution.

Following is a summary of the fiscal year 1983 new personnel requirements for the center:

MUSEUM SUPPORT CENTER; FISCAL YEAR 1983 NEW PERSONNEL REQUIREMENTS

[Dollars in thousands]

	FTP positions	fiscal year 1983 workyears	costs
Protection.....	20	16	\$287
Maintenance and operation of HVAC systems.....	12	12	291
Building and grounds maintenance.....	28	20	320
Program administration.....	6	6	137
Totals.....	66	54	1,035

Following is a detailed list of types of positions and enter on duty information.

FISCAL YEAR 1983 MUSEUM SUPPORT CENTER NEW PERSONNEL REQUIREMENTS

	Enter on duty	Work years
Office of Plant Services		
10 Operations and maintenance mechanics.....	Oct. 1, 1982.....	10
2 Preventive maintenance mechanics.....	Oct. 1, 1982.....	2
12 Subtotal.....		12
Office of Protection Services		
1 Alarms maintance mechanic.....	Oct. 1, 1982.....	1
1 ADP specialist (property alarm systems).....	Oct. 1, 1982.....	1
3 K-9 teams.....	Jan. 1, 1983.....	2.25
15 Guards.....	Jan. 1, 1983.....	11.25
20 Subtotal.....		16

FISCAL YEAR 1983 MUSEUM SUPPORT CENTER NEW PERSONNEL REQUIREMENTS—Continued

		Enter on duty	Work years
National Museum of Natural History			
Program group:			
1	Director	Oct. 1, 1982	1
1	Secretary/administrative service assistant	Oct. 1, 1982	1
1	Registrarial assistant	Oct. 1, 1982	1
1	Clerk typist	Oct. 1, 1982	1
1	Conservator	Oct. 1, 1982	1
5	Subtotal		5
Building management group:			
1	Building manager	Oct. 1, 1982	1
1	Transportation technician	Apr. 1, 1983 .....	.5
1	Secretary	Jan. 1, 1983 .....	.75
1	Transportation clerk	Apr. 1, 1983 .....	.5
1	Administrative clerk	Apr. 1, 1983 .....	.5
1	General foreman	Jan. 1, 1983 .....	.75
1	Laborer foreman	Jan. 1, 1983 .....	.75
1	Janitor foreman	Jan. 1, 1983 .....	.75
1	Janitor leader	Jan. 1, 1983 .....	.75
1	Lamper	Apr. 1, 1983 .....	.5
1	Mobile equipment operator	Apr. 1, 1983 .....	.5
4	Laborers	Jan. 1, 1983	3.0
11	Janitors	Jan. 1, 1983	8.25
26	Subtotal		18
Office of horticulture:			
2	Gardeners	Oct. 1, 1982	2
(1)	Seasonal "other" gardeners	Apr. 1, 1983	(.5)
2	Subtotal		2
National Museum of American History			
1	Conservator	Oct. 1, 1982	1
66	Total additional FTP positions in fiscal year 1983		54
(1)	Total additional "other" positions in fiscal year 1983		(.5)

ADMINISTRATION REQUEST

Mr. MURTHA. An increase of \$100,000 is requested for the Office of Administration. This is the balance of the \$152,000 to accelerate work on the preservation of negatives in the Cooper-Hewitt Museum and Archives. \$80,000 to be used to purchase photographic services and \$20,000 to be used to buy other supplies.

THE DANGER OF NITRATE FILM

What are the dangers of not providing these funds?

Mr. JAMESON. The problem is extensive. There are additional large quantities of photographs stored in the Museum of American History building, in the Photo Library, and scattered through the collections of that museum.

There are aggregates of collections. The problem is intensified where you have large amounts of nitrate films together. We are making progress with the monies this committee provided over the past 2 budget years.

We think with this additional money, we can lick this problem in about 2 years and be sure we don't have any problems of explosion or fire in any buildings.

Mr. MURTHA. You are saying the danger of not providing the funds is explosion or fire?

Mr. JAMESON. Yes, sir.

PROPRIETARY ALARM SYSTEM

Mr. MURTHA. Page 167, \$14,242,000 is requested for the Office of Protection Services, a program increase of \$1,702,000 in program funds over the 1982 base year. Why would it take 10 years to install a proprietary alarm system?

Mr. PEYTON. Mr. Chairman, the proprietary security system that is about to be installed in the Museum Support Center is the result of dissatisfaction with the present leased services from a commercial security company.

We found it increasingly expensive, beyond what we considered to be reasonable, and not responsive to the high security needs of the Smithsonian. Following a study that took place in the time frame of approximately 1976 or 1977, the decision was made by the Institution to go with a wholly owned system which would have to be built to meet the specific, detailed needs of the Smithsonian.

In the course of developing this concept, members of the protection staff of the Institution visited a large number of other organizations perceived to have somewhat similar security needs.

These included other museums, some national defense-type installations with higher security problems and others.

About 1979, in starting to actually proceed with the procurement, the Under Secretary of the Smithsonian directed that thorough investigation be made of the potential use of a Smithsonian-owned computer in the National Air and Space Museum.

This particular computer is used to automate a great many features at the museum primarily in the audio-visual area.

We spent a number of months evaluating the possibility of adding our security system onto this in-place computer, and the final conclusion was that it was not really a practical matter.

However, the Institution engaged the Hughes Aircraft Company, who were the builders of the Smithsonian NASA computer, to investigate and to develop the proprietary system for the Institution.

That work has been ongoing and a contract for approximately \$1.5 million was awarded last year for this work to proceed.

This involved a detailed point-by-point inventory of all the security requirements at all of the Smithsonian Institution's facilities, which has now been completed, a very time-consuming, field-type exercise; the development of the hardware and software that go together to make up this system; and a configuration of the necessary hardware to be installed in the Museum Support Center and the base station located at the Castle.

Mr. MURTHA. How is this related to the same program in the restoration and renovation program which is described at page C-12 of the justification.

Mr. PEYTON. Because this is a long-range and expensive program, the Institution rationalized that a portion of the system should be

viewed as a capital investment. That is, the preparation of the control room and the computer itself, was a proper charge to the R&R account.

On that long-range basis, we have planned on \$300,000 on a museum-by-museum basis.

Mr. MURTHA. Provide for the record a table showing the overall cost of providing that alarm system by facility, divided between this appropriation and the restoration and renovations program.

[The information follows:]

PROPRIETARY ALARM SYSTEM COST

[In thousands of dollars]

	R. & R.	S. & E.
Museum of American History.....	\$300	\$500
Natural History Building.....	300	500
American Art and Portrait Galleries.....	300	250
Hirshhorn Museum.....	150	190
Air and Space Museum.....	150	190
Arts and Industries and Smithsonian Institution Buildings.....	300	270
Zoo.....		175
Museum Support Center and Central Control.....	300	1,200
Totals.....	1,800	3,275

In our fiscal year 1983 budget submission, we provided cost figures for the proprietary security system on pages A-170, C-13, C-18, and C-31. The figures on pages A-170 and C-13 indicated that \$3.3 million would be required for the total phased conversion; the figures on pages C-18 and C-31 showed an R&R cost of \$300 thousand a year between fiscal year 1982-1987 for a total R&R contribution of \$1.8 million. We meant to convey in the budget that the total system cost, including the S&E and R&R portions, would be approximately \$5.1 million.

The following chart combines and clarifies the figures shown in the budget document for the proprietary security system. The system which is tailored specifically for Smithsonian purposes, is necessarily planned for installation over a multi-year period in order to allow for appropriate testing and design modification. As a result of the phased installation, including the effect of inflation, the present cost estimate for the project is likely to increase.

PROJECTED COST OF PROPRIETARY SECURITY SYSTEM

[In thousands of dollars]

Fiscal year	S. & E.	R. & R.	Total
1980.....	\$1486		\$486
1981.....	¹ 440		440
1982.....	² 789	\$300	1,089
1983 estimated.....	440	300	740
1984 estimated.....	440	300	740
1985 estimated.....	440	300	740
1986 estimated.....	240	300	540
1987 estimated.....		300	300
Totals.....	3,275	1,800	5,075

¹ Consists of base amount of \$160,000 plus salary and "other objects" savings applied to system.

² Consists of base amount of \$160,000 plus \$629,000 provided through reprogramming. Funds of \$1,089,000 were needed in fiscal year 1982 for a contract with the Hughes Aircraft Company. The amount of the contract, over fiscal years 1981-82, was \$1,529,000.

Mr. MURTHA. What examples can be provided to the committee showing the need for this program?

Mr. PEYTON. There are a number of examples of obsolete security devices that we have which should be improved. Rather than pinpoint specific locations, we would prefer to leave that as a general concept.

We have not had responsive action from the present contractor and we can provide examples of that.

[The information follows:]

PROPRIETARY ALARM SYSTEM NEED

Examples of need for the proprietary system are:

1. Maintenance on the rented system was performed by the owner. The scheduled maintenance program for the alarm systems was not being followed;
2. The system could be compromised both inside our museums or outside;
3. Antiquated devices were in use in Smithsonian museums for both fire and burglary detection;
4. Smithsonian supervisors had no means of determining whether an alarm signal had been received and responded to properly;
5. The Smithsonian could not directly affect day-to-day security operations since these operations were under the control of contractor operators at their Central Station remote from the Institution.

Mr. PEYTON. We can also provide examples of unreasonableness of the cost that we have been charged for individual work orders.

[The information follows:]

EXAMPLES OF UNREASONABLE COSTS

The following are examples of unreasonableness of cost:

1. Contractor proposal of February 13, 1981, for the installation of a two-reader card access control system at the Radiation Biology Laboratory: \$11,035.00. The capacity of this system was 100 cards. Protective Services, Inc., provided a system able to control up to 1,000 cards, for \$7,280.00;
2. Contractor proposal of February 2, 1982, to extend an existing alarm system to two additional panes of glass at the National Museum of American Art/National Portrait Gallery Building: \$1,091.00. Smithsonian employees did the job in-house for \$61.00;
3. Contractor proposal of February 2, 1982, to provide a new intrusion detection zone on a single door at the National Museum of American Art/National Portrait Gallery Building: \$2,615.00. This price includes \$1,620.00 for labor. The Smithsonian estimates the labor cost for this job as \$200.00;
4. Contractor proposal of February 2, 1982, to extend an existing alarm zone to include two doors at the National Museum of American Art/National Portrait Gallery: \$739.00. This price includes \$720.00 for 16 hours labor. The Smithsonian estimates the labor cost for this job at \$60.00;
5. Contractor proposal of March 29, 1982, to install a zone of intrusion detection at the National Museum of American Art/National Portrait Gallery Building: \$4,255.00. The Smithsonian did the job in-house for \$1,380.00.

OFFICE OF PLANT SERVICES REQUEST

Mr. MURTHA. For the Office of Plant Services, \$27,712,000 is requested. This is an increase of \$650,000 in program funds over the 1982 base.

This will restore the impact of the 4 percent reduction from the 1982 appropriations. If this was such a problem, why wasn't reprogramming requested to mitigate the problem in fiscal year 1982?

Mr. PEYTON. We have traditionally had a base shortage in object class 25 and 26 in the Office of Plant Services account and we have reprogrammed funds internally to make up for these shortages.

SPECIAL FOREIGN CURRENCY PROGRAM

Mr. MURTHA. For the record what is the status of the forward-funded Indian rupee program.

[The information follows:]

SMITHSONIAN FOREIGN CURRENCY PROGRAM

The Smithsonian received appropriations in fiscal year 1980 and fiscal year 1981 for the American Institute of Indian Studies forward-funded reserve. Obligations have been made as follows: fiscal year 1980—\$500,000 equivalent and fiscal year 1981—\$750,000 equivalent for a total of \$1,250,000 equivalent in Indian rupees. The Smithsonian received no appropriation for the reserve in fiscal year 1982 and has not requested funds in fiscal year 1983. The Institution currently plans to seek a third increment for the forward-funded reserve in fiscal year 1984.

In April 1982, the U.S. Embassy in India estimated 5 to 7 years of "excess" currency status for U.S. owned rupees. The Smithsonian hopes to build a substantial reserve of a minimum of \$10 million equivalent in Indian rupees for future AIIS programs before the depletion of the excess rupee account which could come as early as fiscal year 1987.

Mr. MURTHA. What is the status of the effort to salvage more of Moenjodaro?

Mr. RIPLEY. I think Mr. Perrot is best qualified to speak to that as he has been serving on the UNESCO International Committee.

Mr. PERROT. Mr. Chairman, the committee appropriated \$1 million in 1982, which has been reduced by 4 percent, and we are now in the process of developing a contract between the UNESCO and the United States for transfer of these funds.

Necessary steps have been taken in respect to the program and is expected to be completed in 3 weeks to 2 months.

Mr. MURTHA. How much was appropriated?

Mr. PERROT. \$1 million reduced to \$960,000. There is no appropriation request in 1983 but we expect to come back in 1984 and later years to continue the obligation for a total of \$4 million.

ZOO CONSTRUCTION REQUEST

Mr. MURTHA. The 1983 estimate for zoo construction is \$1,550,000, an increase over the 1982 appropriation of \$446,000.

OLMSTED WALK EXHIBITS

\$350,000 is requested for entranceway and Olmsted Walk Exhibits. This will provide for planning of the project and design.

Construction estimated at \$4 million is expected to be requested in 1985. What information can be provided at this point as to how many facilities will be constructed and what the overall designs of the project will be?

Mr. REED. We have already worked out the in-house plans and scope of work for the architect that we would hire. This would be from the Connecticut Avenue gate down to the Harvard Street gate. There would be at least 10 smaller areas that we would be working on in this group. This could be done over a period of time.

We have the scope of work to give the architect, if you wish to have that?

Mr. MURTHA. Provide for the record an allocation of that \$1 million for the items identified on pages C-3, C-4, of the justification.

[The information follows:]

RENOVATION, REPAIRS AND IMPROVEMENTS AT ROCK CREEK

Following are current plans for expenditure of the \$1,000,000 · · · · · tions, repairs and improvements at Rock Creek. There is the pos- nature or other unforeseen circumstances may change the pla reallocation of funds.

Project:	[In thousands of dollars]	<i>Estimated Cost</i>
Repair monkey house cage doors, windows, walls.....		\$150
Sea lion filter system renovation.....		200
Renovation hospital and research building.....		277
Bird House improvements: basement drainage, pergola replacement, skylight replacement, new light fixtures, replace gas boiler		175
Elephant house renovation.....		100
Engineering services		50
Renovation of landscaping in animal public areas		48
Total		1,000

RENOVATION AT FRONT ROYAL

Mr. MURTHA. \$200,000 is requested for renovation of the facilities at Front Royal. Is the entire conservation facility now fenced?

Mr. REED. Yes, sir.

Mr. MURTHA. Are there any uses of surrounding land areas that you consider to be offensive now taking place?

Mr. REED. No, sir.

RESTORATION AND RENOVATION OF BUILDINGS

Mr. MURTHA. Restoration and renovation of buildings; a table beginning at page C-17 shows, by building and type of activity, how the \$8,450,000 would be spent.

What actions has the Smithsonian taken to insure that work done by contractors is warranted?

Mr. PEYTON. Each of our contracts has a warranty provision, Mr. Chairman, and we have both a general warranty and where trade practices or the marketplace will enable us to get additional warranty provisions without an unreasonable expenditure we have asked for and obtained them up to 10 years on specific items of components of the building.

[Additional information follows:]



SMITHSONIAN INSTITUTION

Washington, D.C. 20560
U.S.A.

April 30, 1982

Honorable Sidney R. Yates
Chairman
Subcommittee on Interior
Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

During the Committee hearings on the 1982 Smithsonian budget, the nature, extent, and enforcement of warranties in construction contracts were discussed. After reviewing this matter with the General Counsel, the Director of the Office of Supply Services, the Director of Facilities Services, and others involved with contracting for construction, I would like to provide the following additional information.

All of the contracts let for new construction, repair, and renovation use the standard federal construction contract forms and standard boiler plate required by the Federal Procurement Regulations. These contracts include the specific clauses regarding workmanship, inspection, and contract supervision required by the regulations. Workmanship provisions require that all work must be well done and that all materials be new and of a quality suitable for the project. In addition, the Institution imposes a further general warranty that all work and materials shall be guaranteed for one year from the date of final acceptance. Contractors are also required to furnish any other warranty from the manufacturer or supplier. In particular circumstances or for particular equipment, warranties are specified for periods longer than a year as an addition to the general guarantee. These are required when the importance of the project justifies the cost of an extended warranty.

There are three types of warranty protection as required by Smithsonian contracts:

- 1) General warranty - required on all contracts; one year; parts and material.
- 2) Special warranty - optional at discretion of Smithsonian to protect special equipment or special application (e.g., roof); duration is variable, generally 2-10 years.

- 3) Manufacturer's/supplier's warranties - provided by manufacturer or vendor, generally one year.

There have been no incidents of a contractor failing or refusing to honor a valid warranty. In some cases, contractors have been recalled to the job site several times to perform warranty work at no extra cost to the Institution.

The question of the applicability of a warranty may present substantial legal problems. Failure of the item warranted may be the result of an event outside the scope of circumstances against which the warranty protects an owner. Thus, for example, if a new product is installed in accordance with specifications but failure occurs because the specification or design is improper or inadequate, the contractor cannot be forced under the warranty to correct the deficient product. Similarly, if the owner makes changes to a project which later fails, it may be impossible to prove that the failure was due to improper actions of the contractor, and not the owner's subsequent changes. In both cases, the cost of corrections would be borne by the owner. Based upon our experience, it is our conclusion that warranties are not a significant problem in obtaining a satisfactory product. However, the Institution has found problems as a result of the requirements of the Federal Procurement Regulations.

The Federal Procurement Regulations emphasize that contracts shall be obtained through free and open competition with some limited exceptions. The process is aimed at awarding contracts to the lowest bidder and permits the negotiation of contracts in special circumstances only. From our experience, most competitive awards to the low bidders have been made to acceptable contractors and most work has been completed satisfactorily. Nevertheless, the competitive process and the limitations on the use of negotiation limit our ability to ensure the selection of firms from among those best suited by experience and specialization to meet the Institution's facilities needs. As you are aware, the age, character, and use of our buildings create special circumstances requiring more than average skill and attention by contractors.

Areas of special concern to us include roof and facade work, heating, ventilating, and air conditioning systems, and work affecting the architectural aspects of historic structures. Normally, work of these types cannot be obtained on the basis of a negotiated contract with a highly specialized and experienced firm but must be awarded to the low bidder if that firm can demonstrate general competence and experience. Our experience indicates that the lowest bidder may not always be the one to provide the most satisfactory performance. For this reason,

it is requested that the Institution be authorized a limited exception to the regulations to allow us to negotiate with the most competent firms for work involving building exteriors or interiors and building utility systems where we can certify that such work must be performed to meet the special needs of historic structures, the protection of collections, or public safety. Suggested appropriation language is enclosed. This authority, if granted, will enable the Institution to select contractors on the basis of qualifications as well as price.

Sincerely,

Phillip S. Hughes

Phillip S. Hughes
Acting Secretary

Enclosure

JIWilson:pm

cc: Secy's files; Messrs. Barton, Payton, Jameson, Reiss, Powers

Proposed language to be added to the Restoration and
Renovation portion of Smithsonian Institution
appropriation bill

Provided that the funds appropriated herein to provide
for environmental and protection systems of the buildings housing
the national collections and for repair or renovation of the
exterior of the Institution's buildings may be obligated after
negotiations with selected qualified contractors.

Mr. MURTHA. Beginning at page C-20 is an explanation of the physical condition of each facility within the Smithsonian with a 5-year plan of improvement.

This 5-year activity is not necessarily the total cost for maintaining the facility to the standard proposed by the Smithsonian.

Under the proposal, when does the Smithsonian expect its facilities to be in good shape?

Mr. PEYTON. We think that the Smithsonian facilities are in reasonably good shape right now, Mr. Chairman, but I think any person who has a responsibility for maintenance of real property, whether they be a homeowner or a businessman or a Government official, recognizes that there are annual expenditures that must take place in the maintenance of property to properly preserve it.

That is essentially what our R&R program is all about.

QUADRANGLE CONSTRUCTION COSTS

Mr. MURTHA. What is the estimated cost by year for construction of the Quadrangle development?

Mr. RIPLEY. If the 1983 budget is passed as recommended, we estimate that Federal funds of \$5 million will be required during that fiscal year.

The subsequent 2 years would be in fiscal year 1984, \$15 million of Federal funds; and in 1985, \$16.5 million; with the addition of the planning money a total of \$37.5 million.

This would be matched year by year with Trust funds as we go along to make available the equivalent of \$37½ million in Trust funds.

Mr. MURTHA. And how much in private funds?

Mr. RIPLEY. That is what I call Trust funds.

Mr. MURTHA. What is the proposed distribution of Federal and private funds by year for construction of this facility?

Mr. RIPLEY. I have those figures for the record if you would like.

Mr. MURTHA. Put them in the record.

[The information follows:]

PLANNED DISTRIBUTION OF OUTLAYS FOR QUADRANGLE DEVELOPMENT

[In thousands of dollars]

Fiscal year	Federal	Trust
Prior to 1983.....	\$960	\$2,000
1983.....	5,000	5,000
1984.....	15,000	15,000
1985.....	16,500	15,500
Total.....	37,460	37,500

Mr. MURTHA. How can the Federal partner be assured that once the funds are appropriated that construction will not outstrip the private contributions?

Mr. RIPLEY. We will guarantee to produce the funds necessary as we go along. We already feel that we are so well along with the amount of money raised or pledged that we will undertake to guarantee that.

SMITHSONIAN MAGAZINE

Mr. MURTHA. At tab D, beginning at page D-3, are summary tables showing by program how funds will be collected and spent from various sources.

At page D-4, it appears that revenue from the Smithsonian Magazine would be \$44 million?

Mr. RIPLEY. Yes.

Mr. MURTHA. That is a going concern.

Mr. RIPLEY. Well, it is. That is not net; that is gross.

Mr. MURTHA. All right.

Expenses would be \$39,157,000, a profit of \$5 million in 1982. At page D-5, it is estimated that revenues for 1983 from the magazine would be \$50,504,000 and expenses \$43,539,000, a profit of \$6,965,000.

Is there anything in the justification that would show the 1981 actual experience for the Smithsonian Magazine?

Mr. RIPLEY. In 1981?

Mr. MURTHA. Yes.

Mr. RIPLEY. I think Mr. Hohenlohe can explain.

Mr. HOHENLOHE. The actual net return for the magazine in fiscal year 1981 was \$8,329,000.

Mr. MURTHA. What accounts for the significant difference between the amounts shown in the budget justification for fiscal year 1982, and the actual in fiscal year 1981?

Mr. HOHENLOHE. Mr. Chairman, the cost increases over that time reflect the effects of normal inflation, as well as significant costs beginning in January of this calendar year of increased postal rates that affect both the mailing of the magazine itself, as well as the third-class solicitation to new members.

Mr. MURTHA. What percentage have the postal rates gone up this past year?

Mr. HOHENLOHE. The effect for the second-class mailing was an increase of 30 percent; and for the third-class bulk mailing for non-profit organizations, was a 72 percent increase.

Mr. MURTHA. So you send bulk rates?

Mr. HOHENLOHE. Yes.

Mr. MURTHA. So your rate went up 72 percent?

Mr. RIPLEY. These are very substantial cost increases, of course.

Mr. MURTHA. What has the experience been for the last 3 years for the estimated profit from the magazine and the actual profit for the magazine?

Mr. HOHENLOHE. I would be pleased to supply it for the record, Mr. Chairman.

[The information follows:]

SMITHSONIAN MAGAZINE—NET INCOME

(In thousands of dollars)

Net income	Fiscal year—		
	1979	1980	1981
Estimated	\$5,820	\$5,500	\$5,298
Actual.....	6,343	5,902	8,329

For these three fiscal years, net income from Smithsonian Magazine exceeded budget expectations, and by a considerable margin in fiscal year 1981. While production costs and operating expenses have equalled or exceeded budget in each of these years, subscription income and advertising revenues have been unexpectedly strong, particularly in view of the uncertainties elsewhere in the economy.

Mr. RIPLEY. I would say it has been very close to what we had anticipated simply because we anticipated these increases in costs.

Mr. MURTHA. You knew the Post Office Department was going to increase the rates 72 percent?

Mr. RIPLEY. We are fascinated by what the Postal Service intends to do.

Mr. MURTHA. Thank you, Mr. Secretary. That concludes the hearing for the year.

Let me thank the stenographic reporters, and the chairman also sends his thanks to all the reporters for their fine job.

Thank you very much.

We are adjourned.

[Committee note.--Additional information to the discussion on page 589 of this hearing record follows.]

The Peregrine Fund

for the study and preservation of falcons and other birds of prey

27 May 1982

The Honorable Sidney R. Yates
Chairman, Subcommittee on Interior
and Related Agencies
Committee on Appropriations
U. S. House of Representatives
Washington, D. C. 20515

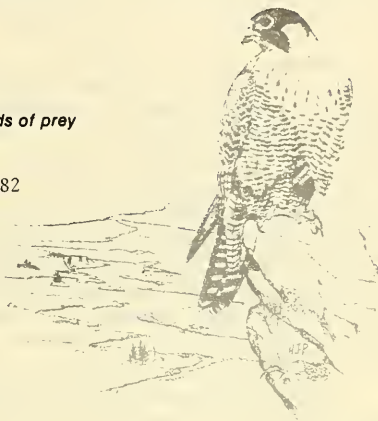
Dear Congressman Yates:

I understand that in recent testimony by representatives of the U. S. Fish and Wildlife Service before your Subcommittee the statement was made that because the Peregrine Falcon recovery programs involving the release of captive produced falcons to the wild have proved to work, there is no need for any more federal funding to demonstrate the feasibility of this procedure--and further--that there are plenty of private funds available to keep the programs going. Neither of these assertions is correct.

The reintroduction of Peregrine Falcons ceased to be experimental and entered a fully operational phase in 1981 with the development of "Five Year Plans" for the eastern program and for the Rocky Mountain program. These plans have been approved by the respective Recovery Teams and have received the endorsement of the Fish and Wildlife Service (see enclosures for the eastern plan). It is important to emphasize that peregrine recovery by the introduction of captive produced falcons into nature is a truly national effort, as I indicated in my testimony before your Subcommittee on 2 March 1982, with three operational programs in action at the University of California, Santa Cruz, at Fort Collins, Colorado, and at Cornell University.

These programs have specific and well projected goals, and they are on target. They are among the most successful programs that have been fostered by the Endangered Species Act of 1973, they are in mid-stream, and they merit continued public support from the Nation's revenues to see them to a successful conclusion.

We have never asked for full support from the federal government. From the beginning the Peregrine Recovery Plans have recognized the need to spread the costs for the recovery of this species widely among federal and state agencies, corporations, foundations, conservation organizations, and private citizens. We do ask, however, that the Fish and Wildlife Service meet its commitment as specified in the officially approved recovery plans to fund the operation of the captive propagation facilities at Cornell and Fort Collins at the level of \$300,000 per year.

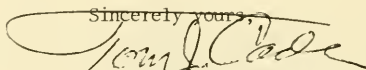


We see no indication that the private sector is prepared to pick up this cost from the federal government. Indeed, our experience has been the other way. In FY-80, of total revenues amounting to \$421,331 for peregrine restoration, 73 per cent came from state and federal agencies (about \$150,000 from the Fish and Wildlife Service). In FY-81 of total revenues amounting to \$607,771, 80 per cent came from governmental agencies (about \$320,000 from FWS). The ratio of government to non-governmental funds in FY-82 is about the same as for the previous fiscal year, although the FWS contribution is less (\$269,000).

Warned in February of 1981 by Assistant Secretary of the Interior, G. Ray Arnett, that it would be the policy of the Reagan Administration to de-emphasize federal support for endangered species programs, my associates and I have been trying very hard to identify alternative sources of money in the private and public sectors. We have approached several, major foundations, so far without substantial results, and with a few notable exceptions, such as Exxon USA, Boise Cascade Corporation, and the J. R. Simplot Company, the response from corporations has been even more discouraging. We have also tried to develop some Arab interests in providing support, since so many of the shaikhs and Saudi princes have a special fondness for falcons; but they are only interested in buying falcons from us. Our current U. S. laws and regulations prohibit commerce even in domestically produced falcons, and in any case The Peregrine Fund is not keen on being forced into a commercial operation in order to support its work in conservation.

If sufficient federal funds can continue to be made available through the Fish and Wildlife Service budget to support the captive propagation of the falcons, we are confident that other federal agencies, states, foundations, corporations, and private citizens will be encouraged to provide the additional monies needed to release and establish the birds in the out-of-doors. This has been the overall funding strategy for peregrine recovery from the beginning, and those of us involved in the work see no justification for departing from it now.

Sincerely yours,



Tom J. Pade

Professor of Ornithology and
Director, The Peregrine Fund



EASTERN PEREGRINE FALCON RECOVERY TEAM

August 5, 1981

Dear Team Members:

It is time once again to think of an annual team meeting. I have made tentative arrangements with Malcolm Edwards to host the meeting in the vicinity of Ashville, North Carolina. This will place the team members in the area of the Southern Appalachians discussed at our last meeting as a potential release site. I would like to hold the meeting between October 26 and November 13 and would appreciate hearing from each of you on your preferred dates and suggestions for agenda items.

I have enclosed a letter from Howard Larsen approving the five year restoration plan agreed upon at our last meeting. Each of you should have a copy of this plan. If not, I would be happy to send you one.

I hope to hear from each of you soon and will attempt to set the final meeting date and agenda by the end of August.

Sincerely,

Eugene R. McCaffrey
Team Leader

ERM:met

cc: H. Larsen (Att: P. Nickerson)



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
One Gateway Center Suite 700
NEWTON CORNER, MASSACHUSETTS 02158

June 10, 1981

Mr. Eugene R. McCaffrey
Delmar Research Laboratory
Department of Environmental Conservation
Delmar, New York 12054

Dear Gene:

Please excuse the long delay in responding to your letter of January 6, 1981, on the Five-Year Peregrine Restoration Plan. Prior to endorsing that plan, we wanted to complete our assessment and our contract negotiations with Dr. Cade.

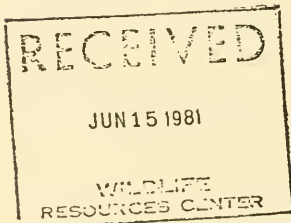
It is our intent to proceed essentially as the five-year plan specifies.

Should modifications be required, these can be discussed and resolved at the Annual Coordination Meeting.

Thank you for your patience.

Sincerely yours,

ACTING Regional Director



M E M O R A N D U M

TO: Regional Director, U. S. Fish and Wildlife Service,
Region 5

FROM: Tom J. Cade, The Peregrine Fund, Inc.,
Cornell University

SUBJECT: Eastern Peregrine Reintroduction--Five Year Operational
Plan for 1981-1985

DATE: 20 October 1980

Introduction.

Since 1975 The Peregrine Fund has been working in cooperation with the U. S. Fish and Wildlife Service, and other federal and state agencies, on an experimental program to develop methods for release and establishment of captive produced peregrines in the eastern environment. This program is part of the Eastern Peregrine Falcon Recovery Plan, which was officially approved by the Director, FWS in 1979 (see Bollengier, et al., 1979). The results of this work from 1975 through 1979 have been analyzed by Barclay (1980), and the more general aspects of falcon propagation and reintroduction have been summarized by Cade (1980). Briefly, 204 peregrines were released by hacking through 1979 at 21 locations in 9 states and the District of Columbia. One hundred and forty-six (72%) survived to independence and dispersed normally from the release sites, and we estimate that approximately 50 of these birds (adults and subadults) were present in the released population in the spring of 1980.

From this effort we now have at least four established pairs of peregrines in the eastern United States. Three are located at towers in coastal New Jersey, and the other is on the U.S.F. & G. building in Baltimore. Two of the New Jersey pairs successfully reared their own young in 1980. In addition, a yearling pair appears to have set up headquarters in Atlantic City, and a female released in 1975 or 1976 has mated with a wild male in southern Quebec; this pair also produced two young in 1980. The identity of another successfully breeding pair in Maine remains to be determined, but it is likely that one or both of these peregrines are released birds.

In 1980, 67 peregrines were hacked or fostered at 15 sites from Virginia to New Hampshire, and 59 reached independence. This work brings the total peregrines released in the East to 271 since 1975, and the total reaching independence to 205, for an overall success rate of 75.6 per cent.

Releases have been divided among (1) natural, historical cliff-eyries (10 sites and 25 broods), (2) hack-sites located on towers (13 sites and 33 broods), and buildings in cities (5 sites and 6 broods). Survival to the stage of independence has been significantly lower for young released at natural sites than for those at "artificial" sites, owing mainly to the greater incidence of predation by great horned owls at the former. No natural site has yet been occupied by a pair of released peregrines; but single birds have been seen in subsequent years at five cliff-sites, and one female has paired with a wild male at an historical cliff-eyrie in Quebec.

These results have confirmed our early expectation that artificial nest-sites located in highly favorable feeding habitat for falcons (coastal wetlands) would be attractive to released peregrines and would promote relatively fast establishment of breeding pairs. They also indicate that grouping release sites close together is a better strategy for promoting pair formation than spacing them far apart.

It can now be concluded that hacking is a workable, if somewhat inefficient, way to establish breeding peregrines in regions where the species has been extirpated or does not presently exist. Based on our experiences from 1975 through 1980, we feel that the best operational plan for 1981-1985 would be to capitalize on the success of releases from artificial sites by attempting to establish a small, self-maintaining population of breeding pairs in the Chesapeake Bay and mid-Atlantic Coast region (priority areas 1 and 2 of the recovery plan), while continuing to work with natural cliff-sites in the Adirondack, Green, and White mountains of New York, Vermont, New Hampshire and Maine (priority areas 4, 6, and 8 of the recovery plan), where predation by great horned owls appears to be markedly less severe than in other natural areas where we have tried to release falcons. The following sections outline plans for these efforts over the next five years. Meanwhile, experiments are under way (under separate contract from FWS) to develop alternate methods of release and establishment that will be more effective for natural eyries.

Chesapeake Bay-Atlantic Coast Region.

Historically peregrines nested only rarely in the tidewater region of the Atlantic Coast, but it is not correct to state--as some have--that these coastal habitats lie entirely outside the natural breeding range of the species. There are two known cases of nesting in old osprey nests in coastal Virginia (Jones, 1946), and the New Jersey State Geologist's Report for 1890 lists the peregrine as breeding in Cape May County, but no details are given. These falcons were probably using an osprey or bald eagle nest. Although we do not know what the situation may have been for peregrines prior to the 1800's, the low incidence of breeding in coastal habitats was almost certainly owing to the absence of the North American peregrine's preferred nesting sites--cliffs or high bluffs--

as the coastal marshes and estuaries otherwise offer an abundance of avian prey for falcons. The fact that fall and spring migrant and wintering peregrines have always been relatively common in these coastal habitats further testifies to their optimum suitability for falcons. Indeed, numbers of migratory peregrines still occur regularly in the tidewater in every month of the year except June, July, and August.

Nevertheless, the plan to establish a breeding population of peregrines in this region meets some resistance, because it relies on artificial nest structures and because it is an attempt to put nesting peregrines into habitats where the species has not occurred naturally as a breeder in recent historical time. A few people with puristic views about nature object simply on the grounds that the plan would have an artificial and unnatural result which is esthetically unacceptable to them. Such people do not have their eyes focused on the real world. Others have worries about the effects that breeding peregrines might have on prey species. The least tern is the species about which such concern is most often expressed, as some of its breeding colonies exist in a precarious state along the Atlantic Coast.

The peregrine falcon is a bird-catching predator, but it selects from a very wide range of avian species, from the smallest warblers to large ducks and even geese. Males tend to pick out birds in the size range from 30 to 150 grams most frequently, while females feed more on heavier prey in the 100 to 500 gram range. Although certain species within these size ranges are especially vulnerable to attack by peregrines, owing to their particular styles of flight or to conspicuous flash patterns (e.g., doves and pigeons, snipe, flickers, blue jays, meadowlarks), the generalized nature of most peregrine predation means that no one species is likely to constitute more than a small fraction of the total number of individuals taken by a pair of breeding peregrines, and this conclusion is especially true for uncommon species that make up only a small fraction of the total available prey.

Moreover, breeding peregrine populations are always widely dispersed at low densities, and consequently the relative number of falcons to prey remains so low that the falcons exert no measurable effect on the annual turnover of individuals in the prey populations. Thus, peregrine predation is epiphenomenal to other factors controlling the modality and numbers of the species on which the falcon preys.

These two basic features of peregrine predation--the catholic diet consisting of many avian species and the low density of breeding falcons--mean that fears expressed about the deleterious influence of peregrines on other species are unwarranted. This is not to say that peregrines never catch individuals of uncommon or "endangered" species--only that the number they catch has no significance in influencing population sizes from one year to the next.

Terns are a good example. There is no question that peregrines catch some terns. We have observations for both least and common terns caught by our released peregrines, and they no doubt also take some Arctic and gull-billed terns from time to time. The acts of predation we have witnessed have all been on single terns foraging away from nesting colonies, and contrary to speculation we have no evidence to suggest that peregrines have a special propensity to harry tern colonies or to develop the habit of visiting tern colonies regularly to seek food. Terns are aggressive birds at their nests, and when a peregrine flies over a ternery, the adult terns rise up in a flock and mob the peregrine--an anti-predator response that is highly effective and that should not be misinterpreted as maladaptive behavior. It is precisely the best action for the terns to take, because falcons are loathe to attack a massed flock of birds.

Natural predators of adult terns, like the peregrine falcon, are not the cause of declining tern numbers and are not even major factors in overall tern mortality. Gull depredations on chicks, storms, and human disturbance are much more significant mortality factors. Where tern colonies have declined in numbers, the obvious causes relate to habitat destruction or deterioration, to competition from gulls for nesting ground, and to human disturbances, not to natural predators. The future welfare of terns will be best served by keeping the attention of conservationists and government officials focused on the real problems facing these birds rather than by creating imaginary or hypothetical problems that serve only to divert attention from the actions needed for preserving habitat and controlling human activities at tern colonies. It should also be noted that the least tern has actually increased in numbers, generally, along the Atlantic Coast since the cessation of shooting for the millinery trade.

This reintroduction plan calls for the establishment of a small population of 20 to 30 breeding pairs of peregrines in the Chesapeake Bay-Atlantic Coast region over the next five years, a population that will be dispersed over a combined land and water area of some 20,000 square miles at a maximum density of one pair per 667 square miles. On the assumption that enough nesting sites could be created to saturate all potential habitat, this number of pairs represents less than half the number that probably could be sustained in this region, given the food supplies available and the minimum territory size that breeding peregrines can adjust to. Based on known densities of regional populations and their patterns of dispersion in other parts of North America, as well as the former density and dispersion of breeding pairs in the eastern United States, twenty to thirty pairs in this region probably represent a deme of breeders that would be capable of self-maintenance by replacement from autochthonous progeny through time.

Two advantages would accrue once the arbitrarily designated number of artificial nest sites has been occupied by breeding pairs. First, we would have an established, self-perpetuating population of peregrines once more in the eastern environment--a

population that would be completely manageable through manipulation of the artificial nest-structures and also located in a region for optimum study and observation by the interested American public. Thus, part of the goal of the eastern recovery plan would be fulfilled. Secondly, if the reproductive performance of this population is high enough, as it should be in this region of abundant food for falcons, then a surplus of non-breeding falcons should build up over a period of years; and these extra birds should disperse into unoccupied range and establish additional eyries. Some will no doubt find suitable sites in the tidewater--old osprey nests, for example--but there is a good prospect that many will disperse beyond the coastal zone and become established at some of the historical cliff-eyries along the Potomac, Susquehanna, Delaware, and Hudson rivers, as well as in the Appalachian Mountains, habitats which lie within the known dispersal range of peregrines.

Table 1 lists the 14 existing and 21 other possible release sites by state, progressing from south to north. It is highly probable that the Sedge Island, Manahawkin, Brigantine, and Sea Isle City sites in New Jersey and the Baltimore site will all be occupied by territorial birds or breeding pairs in 1981. Any of the other existing sites could possibly become occupied, especially Cobb Island, Fisherman's Island, South Marsh Island, and Chincoteague. Thus, to maintain 15 operational hack-sites in this region, we need to anticipate these occupancies by establishing at least six new sites each year until we have reached our total of 30 sites. The following is our proposed priority for 1981, but it would be advantageous to establish as many of the proposed sites listed in Table 1 as soon as possible, since there may well be prospective occupants waiting to take them over, as happened at Sea Isle City in 1980.

Our priority for establishing release-sites in 1981 is:
 (1) Delaware Bay side of New Jersey, site A; (2) Delaware Bay side of New Jersey, site B; (3) Bombay Hook NWR, Delaware; (4) Great Fox Island, Virginia; (5) Philadelphia; (6) Assateague National Seashore, north end, Maryland.

Increasingly in the future, the construction of release-sites and the routine hacking operations should pass to the management of state or other local interests, and the direct involvement of personnel from The Peregrine Fund should be reduced, so that our limited resources and staff can be used for increasing propagation and for exploring alternate methods of release. We feel that the kind of arrangement that has already been in operation for the last three years in Virginia, through the cooperation of Dr. Mitchell Byrd of the College of William and Mary and the Virginia State Game Commission, and the proposed plan for Pea Island NWR with Dr. Abe Schwartz at Research Triangle Park and the North Carolina Wildlife Resources Commission are excellent models that need to be applied generally in the eastern peregrine release program. The Peregrine Fund would like to see the 1981 season used as a transitional period in which our people are phased out and local groups take over.

The Peregrine Fund staff can continue to function in consulting and instructional role for hacking or fostering operations, or be directly involved in the work in those cases where local organizations do not exist to take over hacking operations.

Additionally we propose to try a different way of provisioning the release-sites with food for the falcons. In the past we have raised coturnix quail at Cornell for this purpose, but last summer when we had to destroy 5,000 quail that became infected with a contagious disease, we were suddenly faced with the necessity of finding an alternate food supply quickly for the hack-sites. We were able to obtain feral pigeons from several sources, and these birds proved to be satisfactory. Owing to the loss of facilities which we had borrowed from other Cornell departments to raise quail, we are no longer in a position to raise enough quail to provision release-sites as well as supply food for all the falcons in the propagation program during the breeding season. Also, the quail are expensive to raise, especially considering that up to 1/4 to 1/3 of those transported to the field are lost in one way or another before they can be used. Pigeons have some advantages: They survive better under field conditions than quail; they can be maintained on a less expensive feed, and they are probably more nutritious than quail, i.e., more calories per unit mass because their flesh contains less water. Large numbers of feral pigeons are trapped by municipalities, zoos, and others, and even if we have to pay a dollar a piece for them, we will be ahead on costs.

The pigeons will have to be held for a month or more before use--in part to check them for contagious diseases--and this holding will necessitate the location of suitable cages. We can hold a fair number at Cornell, but again we feel that it would be most advantageous to decentralize the holding of pigeons as much as possible. Holding facilities located in Virginia, Maryland, New Jersey, and New York would be ideal and would greatly reduce transportation costs.

Adirondack, Green, and White Mountains.

We have carried out limited hacking operations in this region at historical cliff-eyries since 1976 in cooperation with the U.S. Forest Service and the States of New Hampshire and Vermont. The New Hampshire site has been in operation for five years; the Vermont site was used once. These are the only natural eyries where we have had no encounters with great horned owls, and based on other ornithological information, it appears that great horned owls are not common nesters at the higher elevations in these mountains, particularly where agricultural lands make up a small fraction of the total environment.

The relative scarcity of owls is one good reason for concentrating efforts to establish peregrines at natural eyries in this region, but there are others. Another is that this region formerly

held a rather high density of breeding peregrines, and more than 75 historical eyries are known in Vermont, New Hampshire, and adjacent parts of New York and Maine. (In fact, more than half of all known eyries in the eastern United States occur in the five states of Maine, New Hampshire, Vermont, Massachusetts, and New York.) This fact suggests that the environment of these mountains was, at least formerly, better than most other eastern habitats for nesting peregrines, and the presence of many historical eyries, as well as other potentially suitable cliffs, rather closely spaced offers advantages for the establishment and spread of a founding population from the release of captive produced falcons. The fact that two pairs of peregrines are now breeding at historical eyries in Quebec and Maine not far away is a further indication that this general region is again suitable for falcons; and the presence of such pairs--there may be others--is another reason for concentrating releases in this region over the next five years. In some cases these established pairs can be used for fostering captive produced young, just as we have been doing in the Rocky Mountains, and this procedure should be considered for the pairs in Quebec and Maine in 1981, if their naturally produced broods are small.

We propose to locate six new sites for use in 1981--three in the Adirondacks of New York, and three in Vermont and New Hampshire. At least one of the latter should function as a replacement for Owl's Head, N.H., as that cliff is likely to be occupied by a territorial adult or by a nesting pair. Logistics is the main problem involved in establishing and operating release-sites in this region, and it should be noted that helicopters are a great advantage.

We will be able to gauge the success of operations at cliffs in this region over the next five years. As breeding pairs take over release-sites in the Chesapeake Bay-Atlantic Coast region and we are able to scale down the number of young released there, we can increase the number of sites and the number of young released in the mountains. For 1981 we propose to invest about 70 per cent of the young available for release in the southern region and the other 30 per cent at natural eyries in the northeast. Table 2 outlines the schedule of work at release-sites in 1981.

References.

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- Bollengier, Rene M., Jr., et al. 1979. Eastern peregrine falcon recovery plan. U. S. Fish and Wildlife Service. Mimeographed, 147 pp.
- Cade, Tom J. 1980. The husbandry of falcons for return to the wild. International Zoo Yearbook, vol. 20 (in press).
- Jones, F. M. 1946. Duck hawks of eastern Virginia. Auk 63:592.

Table 1.--List of Release-Sites for the Chesapeake Bay-Mid-Atlantic Coast.

No.	State	Location	Status or Comment
1	North Carolina	Pea Island NWR	Proposed tower site
2	North Carolina	MacKay Island NWR	Possible future site
3	Virginia	Back Bay NWR	Possible future site
*4	Virginia	Norfolk	Established building site
*5	Virginia	Fisherman's Island NWR	Established tower site
*6	Virginia	Cobb Island	Established tower site
7	Virginia	Wallops Island	Proposed tower site
*8	Virginia	Chincoteague NWR	Established tower site
9	Virginia	Great Fox Island, Ch. B.	Proposed tower site
10	Virginia	Chesapeake Bay island(?)	To be located for tower
11	Virginia	Chesapeake Bay island(?)	To be located for tower
12	Maryland	Assateague Natl. Seashore	Proposed tower site
*13	Maryland	South Marsh Island, Ch. B.	Established tower site
14	Maryland	Deal Island	Possible future site
15	Maryland	Blackwater NWR	Possible future site
16	Maryland	Mid-Chesapeake island(?)	To be located for tower
17	Maryland	Mid-Chesapeake island(?)	To be located for tower
*18	Maryland	Baltimore	Established building site
*19	Maryland	Carroll Island	Established tower site
*20	Maryland	Aberdeen Proving Gr.	Established tower site
*21	District of Col.	Washington	Established building site
22	Delaware	Cape Henlopen State Pk.	Possible future site
23	Delaware	Prime Hook NWR	Possible future site
24	Delaware	Bombay Hook NWR	Proposed tower site
25	New Jersey	Delaware Bay marsh	Proposed tower site
26	New Jersey	Delaware Bay marsh	Proposed tower site
*27	New Jersey	Sea Isle City	Established tower site
28	New Jersey	Atlantic City	Pair established?--provide nest
*29	New Jersey	Brigantine NWR	Established tower site
*30	New Jersey	Manahawkin	Established tower site
*31	New Jersey	Sedge Island	Established tower site
32	Pennsylvania	Philadelphia	Proposed building site
*33	New York	Manhattan	Established building site
34	New York	Long Island, Hempstead?	Possible future site
35	New York	Long Island, Suffolk Co?	Possible future site

Totals = 14 established,* 9 proposed, 12 additional

Table 2.--Peregrine Release Plan for 1981.

Location	Site Type	Approximate Release Date	Administration and other details
Pea Island, NC	tower	May	State and federal approval pending; tower and box, etc. to be built by Dr. A. Schwartz and state agency.
Norfolk, VA	building	May	Site ready; managed by Dr. M. Byrd.
Fisherman's Island, VA	tower	May	Site ready; check for occupancy in spring; M. Byrd.
Cobb Island, VA	tower	May	Site ready; check for occupancy in spring; M. Byrd.
Wallops Island, VA	tower	June	Proposed new tower site; coordinate with NASA and M. Byrd.
Chincoteague, VA	tower	June	Site ready; check for occupancy in spring; M. Byrd.
Great Fox Island, VA	tower	June	Proposed new site; coordinate with M. Byrd.
South Marsh Island, MD	tower	June	Site ready; check for occupancy in spring; G. Taylor.
Deal Island, MD (or other Chesapeake island)	tower	June	Proposed new site to be used if South Marsh is occupied; coordinate with G. Taylor.
Assateague Island, MD	tower	June	Proposed new site; coordinate with National Park Service, Maryland State Parks, and G. Taylor.
Washington, D. C.	building	June	Site on Smithsonian castle ready; check for returning birds in spring; possible switch to Washington Cathedral.
Baltimore, MD	building	May-June	Check breeding activities of pair; supplement brood if necessary.
Carroll Island, MD	tower	June-July	Site for tame hack or release of adult pair; coordinate with Bill Russell and Scott Ward.
Aberdeen, MD	tower	June	Site ready; check for occupancy in spring; Bill Russell.
Philadelphia, PA	building	June	Proposed new site to be selected; probably City Hall; coordinate with M. Puglisi and city officials.
Sea Isle City, NJ	tower	May-June	Site ready; probably will be occupied; check in spring & supplement if needed; coordinate with P. McLain.
Atlantic City, NJ	building	?	Yearlings present in 1980; need to place nest boxes on appropriate buildings.
Brigantine, NJ	tower	May-June	Established pair; check in spring & provide young as needed.
Manahawkin, NJ	tower	May-June	Established pair; check in spring & provide young as needed.
Sedge Island, NJ	tower	May-June	Established pair; check in spring & provide young as needed.

Table 2 continued

Delaware Bay, NJ (A)	tower	May	New tower location needs to be selected; tower should be built before spring; coordinate with P. McLain.
Delaware Bay, NJ (B)	tower	May	New tower location needs to be selected; tower should be built before spring; coordinate with P. McLain
Bombay Hook, Del	tower	May-June	Obtain state approval and coordinate tower construction with refuge staff
Manhattan, NY	building	June	Site ready at Manhattan Life; other locations should be considered--e.g., Woolworth Building; Columbia University.
Adirondacks, NY	cliff	June-July	Select three cliff sites approx. 10 miles apart in high peaks region; coordinate with NY DEC & Adirondack Park Agency.
Vermont, New Hampshire	cliff	June-July	Select three cliff sites with U. S. Forest Service and state wildlife agencies.
Owl's Head, NH	cliff	June-July	Check for occupancy in spring to determine suitability for hacking, depending on presence or absence of adults.
Maine	cliff	June-July	Discuss possibility of monitoring breeding activities of established pair and supplementing young by fostering; coordinate through Paul Buckley, NPS.
Quebec	cliff	June-July	Discuss possible fostering of young; coordinate with David Bird, Macdonald College, McGill University, Montreal.

[Committee note.--Additional information for the questions on page 1023 of this hearing record, titled "Impact of Deferral" follows.]

HISTORIC PRESERVATION FUND

<u>STATE</u>	<u>PRIOR 1982 ALLOCATION</u>	<u>\$ SHARE OF DEFERRAL</u>
Alabama	\$ 338,211	\$ 11,526
Alaska	295,492	10,071
Am. Samoa	31,183	1,063
Arizona	276,309	9,417
Arkansas	427,752	14,578
California	593,416	20,224
Colorado	329,309	11,223
Connecticut	318,205	10,844
Delaware	280,269	9,552
D. C.	210,343	7,169
Florida	412,094	14,044
Georgia	414,876	14,139
Guam	133,426	4,547
Hawaii	197,326	6,725
Idaho	373,811	12,739
Illinois	356,900	12,163
Indiana	250,530	8,538
Iowa	316,625	10,791
Kansas	159,802	5,446
Kentucky	432,567	14,742
Louisiana	277,183	9,446
Maine	303,751	10,352
Maryland	456,322	15,552
Massachusetts	469,387	15,997
Michigan	403,757	13,760
Minnesota	441,171	15,035
Mississippi	274,338	9,350
Missouri	403,305	13,744
Montana	302,263	10,301
Nebraska	230,720	7,863
Nevada	188,793	6,434
New Hampshire	327,284	11,154
New Jersey	350,360	11,940
New Mexico	387,250	13,198
New York	486,022	16,564
North Carolina	566,475	19,305
North Dakota	191,849	6,538
No. Mariana Is.	105,029	3,580
Ohio	527,555	17,979
Oklahoma	273,744	9,329
Oregon	256,857	8,754
Pennsylvania	539,044	18,371

HPF - Page 2

<u>STATE</u>	<u>PRIOR 1982 ALLOCATION</u>	<u>\$ SHARE OF DEFERRAL</u>
Puerto Rico	\$ 222,125	\$ 7,570
Rhode Island	455,684	15,530
South Carolina	435,312	14,835
South Dakota	364,674	12,428
Tennessee	319,651	10,894
Texas	427,782	14,579
Trust Territory	213,334	7,271
Utah	386,620	13,176
Vermont	344,565	11,743
Virginia	405,022	13,803
Virgin Islands	204,608	6,973
Washington	384,605	13,107
West Virginia	300,114	10,228
Wisconsin	407,989	13,904
Wyoming	155,580	5,302
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SUBTOTAL	\$18,938,570	\$645,430
National Trust	4,280,430	135,570
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TOTAL	\$23,219,000	\$781,000

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